## South Australian Year Book



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# SOUTH AUSTRALIAN YEAR BOOK 1976

Malcolm Harrington

A view of the Flinders University of South Australia and, nearer the camera, the Flinders Medical Centre which admitted its first patients on 6 April 1976. The Centre, an integrated teaching hospital and medical school, will accommodate about 500 patients on completion of Phase III in 1977.





# South Australian Year Book

No. 11: 1976

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Deputy Commonwealth Statistician and Government Statist

AUSTRALIAN BUREAU OF STATISTICS
SOUTH AUSTRALIAN OFFICE

### **PREFACE**

The South Australian Year Book is a general reference work presenting an authoritative and comprehensive statistical and descriptive portrayal of South Australia. It includes studies of the historical and geographical background and of the social, physical and financial development of the State culminating in a picture of South Australia as it is today.

This volume, the eleventh issue of the Year Book, includes special articles on the Insects of South Australian Homes and Gardens, the Adelaide Children's Hospital and the South-East. Other items of special interest are the South Australian Land Commission, South Australian Film Corporation, 1976 Adelaide Festival of Arts, National Wage Indexation, Tourist Accommodation, Australian Postal Commission, Australian Telecommunications Commission, Age-specific Birth Rates, Gross and Net Reproduction Rates, and a map of Air Services in South Australia. Some chapters or portions of chapters have been condensed to make room for the additional material but in such cases appropriate cross-references are given indicating in which earlier volumes the more complete information may be found. A list of special articles which appeared in previous issues is shown on page 755.

Other official statistics of South Australia are published in different media, each chosen as the most appropriate to meet a particular need, whether this be for a compact reference guide, or for a more detailed historical or up-to-date data, either on a specific subject or embracing wider fields.

A comprehensive range of statistics is published also by the Australian Statistician covering the whole of Australia (but giving some broad details about the States) and by other Deputy Commonwealth Statisticians for their respective States. The details of such publications are available at each office of the Bureau.

This Office maintains an Information Service, which, on request, supplies available statistical information and advice on which publications are appropriate, and a library in which all publications of the Australian Bureau of Statistics are available for reference. Businessmen, government officers and members of the public are invited to make use of these services.

I gratefully acknowledge the valuable assistance given by contributors of special articles and by the Government Printer and his staff. My thanks are tendered to the staff of this Bureau especially Mr A. J. Cattermole, B.Ec., under whose direction the Year Book was compiled by Mr G. D. Carey, B.Ec., AASA (Senior).

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### METRICATION

In this publication quantities are shown in metric units.

1 millimetre	=	0.03937 inches
1 metre	=	3·28083 feet
1 kilometre	=	0.621371 miles
1 hectare	=	2.47105 acres
1 square kilometre	==	0.386102 square miles
1 kilogram	=	2·20462 pounds (lb)
1 tonne	=	0.984207 ton
1 tonne	=	36.7437 bushels of wheat
1 tonne	=	44.0925 bushels of barley
1 tonne	=	55.1156 bushels of oats
1 cubic metre	=	35.3147 cubic feet
1 cubic metre	==	423.776 super feet
1 cubic metre		27·4961 bushels
1 litre	=	0·219969 gallons

### **EXPLANATORY NOTES**

In general, statistics in this volume relate to South Australia. A few tables, which are appropriately footnoted, include details for the Northern Territory.

Values are shown in Australian dollars (\$ or \$A) and cents unless another currency is specified.

In tables any discrepancies between totals and sums of components are because of rounding.

### Symbols Used

n.a.	not collected, not available for publication
• •	not applicable
n.e.c.	not elsewhere classified
n.e.i.	not elsewhere included
n.e.s.	not elsewhere specified
	nil or less than half the final digit shown
*	figures not yet available
p	preliminary
	break in continuity of series (where drawn across a column between two consecutive figures)

### Citation of Acts

Acts of the Australian Parliament are cited in *italics* with the relevant years in roman type e.g. Census and Statistics Act 1905-1973.

Acts of the South Australian Parliament are cited in roman type e.g. Licensing Act, 1967-1976.

PART 1

### NATURAL ENVIRONMENT

### 1.1 DESCRIPTION

### Size and Location

The State of South Australia has the Southern Ocean to the south and is flanked on the other sides by land. It lies south of the 26th parallel of south latitude and has as a western boundary the 129th meridian of east longitude. The eastern boundary, north of the River Murray, corresponds with the 141st meridian, while to the south, between the river and the sea, the boundary lies approximately three kilometres to the west of this meridian.

The State is approximately 1 201 kilometres from east to west at the northern boundary and 1 143 kilometres at the head of the Great Australian Bight; from north to south it varies from 630 kilometres near the western extremity to approximately 1 325 kilometres near the eastern boundary; its coastline, excluding islands, measures approximately 3 540 kilometres. South Australia covers a total area of 984 375 square kilometres (one-eighth of the area of the Australian continent); however, approximately one-third of this area has no significant economic use and over one-half is devoted to extensive pastoral pursuits. Approximately 99 per cent of the population live south of the 32nd parallel.

#### Standard Time

In terms of The Standard Time Act, 1898 South Australia has used 'the mean time of the meridian of longitude one hundred and forty-two and a half degrees east of Greenwich' as standard time since 1 May 1899. This time, known in

Australia as Central Standard Time, is nine hours thirty minutes ahead of Greenwich Mean Time, one hour thirty minutes ahead of Western Standard Time used in Western Australia and thirty minutes behind Eastern Standard Time used by States on the east coast of Australia.

Before 1 February 1895 the meridian of Adelaide 138° 35' east (i.e. 9 hours 14 minutes ahead of Greenwich) was used to determine standard time in South Australia and subsequently from 1 February 1895 to 30 April 1899 the meridian 135° (i.e. 9 hours ahead of Greenwich) was used.

In several years during the 1939-45 War daylight saving in summer time was introduced by the Australian Government under National Security Regulations. Summer time was fixed at one hour in advance of standard time from 2 a.m. on 1 January 1942 to 2 a.m. on 29 March 1942, from 2 a.m. on 27 September 1942 to 2 a.m. on 28 March 1943 and from 2 a.m. on 3 October 1943 to 2 a.m. on 26 March 1944.

Under the Daylight Saving Act, 1971 daylight saving was introduced for the first time since the 1939-45 War at 2 a.m. on 31 October 1971 and remained in force until 2 a.m. on 27 February 1972. During this period 'South Australian summer time', one hour ahead of South Australian Standard Time, was adopted.

The Daylight Saving Act Amendment Act, 1972, assented to on 12 October 1972, provided for the observance of daylight saving in the Summer of 1972-73, and in each subsequent summer, from the last Sunday in October until the first Sunday in March, South Australian summer time being adopted during this period.

A special article on the basis of timekeeping and the determination of time standards was included on pages 1-2 of the South Australian Year Book 1973. An article on the determination of the time of sunrise and sunset was included on pages 3-5 of the same issue.

### Physical Features

South Australia is a land of generally low relief, the inland area being largely covered by featureless plains, or sand and gibber deserts. Approximately 50 per cent of the State is less than 150 metres above sea level and over 80 per cent is less than 300 metres. Even the dominant mountains, the Mount Lofty-Flinders Ranges system, nowhere exceed 1 200 metres and have at no point proved difficult barriers to communication.

On the other hand the pattern of communication and development has been greatly influenced by the nature of the coastline, the south-easterly trend of which is interrupted by two major indentations, Spencer Gulf and Gulf St Vincent. These two relatively shallow depressions cut into the settled areas a distance of approximately 300 and 150 kilometres respectively. The resultant natural divisions earlier tended to develop their own centres and many ports were constructed along the coast in spite of the fact that, with the exception of the area between Port Lincoln and Fowlers Bay, the nature of the coastline is not particularly accommodating to port development.

Kangaroo Island, approximately 480 kilometres in circumference and covering 4 350 square kilometres, is the predominant island off the South Australian

coastline. There are, however, approximately 100 islands in all, relatively few of which are utilised.

The effect of the vast ocean area to the south is a more temperate climate than would be suggested by the latitude, while the trend of the coastline exposes the coastal areas to the westerly rain-bearing air streams.

The most important mountains are the Mount Lofty-Flinders Ranges system. Kangaroo Island structually belongs to these ranges which, together with parallel subsidiary ranges, extend north from Cape Jervis some 800 kilometres to the northern end of Lake Torrens. In the south the rounded hills of the Mount Lofty Ranges are of comparatively low altitude with Mount Lofty, the highest peak, being 727 metres. The western side of these ranges presents steep scarps to the Adelaide plains while on the eastern side more gentle slopes merge into the Murray Basin.

To the north the Flinders Ranges are of greater height and sharper outline than their southern counterpart. St Mary Peak of 1 166 metres is the highest point. North of Peterborough there is a divergence from the main range which stretches via the Olary Ridges to the Barrier Range and Broken Hill. In the far north the ranges again diverge; one spur circling the northern end of Lake Torrens and the other ending north of Lake Frome. The Flinders Ranges contain some unusual basins of which Wilpena Pound is perhaps the best known.

The Mount Lofty-Flinders chain has an important climatic influence which results in higher rainfall on the plains to the west of the ranges, and in the ranges themselves, with relatively dry conditions in the Murray Basin.

The western half of the State is largely occupied by a low plateau over which an intermittent series of low ranges, including the Warburton, Stuart, Denison, Peake and Everard Ranges, stretch from the Flinders to the somewhat higher Musgrave Ranges in the far north-west. Mount Woodroffe (1 440 metres), the highest point in the State, is located in the Musgrave Ranges.

The comparatively low hills of the Gawler Ranges form the northern side of the Eyre Peninsula triangle, and to the west of Whyalla lie the economically important Middleback Ranges. Isolated peaks of volcanic origin are found in the extreme south-east of the State.

The River Murray, which drains approximately one-seventh of Australia, enters the sea in South Australia and is the State's only major river. The fall of the Murray is very slight, dropping less than 22 metres over the 642 kilometres between the border and the sea. For the 216 kilometres to Overland Corner the river occupies a wide valley and then passes through a narrower steeper-sided valley to Lakes Alexandrina and Albert at its heavily silted mouth.

Surrounding the northern Flinders Ranges is a series of vast lakes which are in reality lakes only after particularly heavy rainfall, normally appearing as shallow depressions with a salt or clay encrusted surface. Lake Eyre, the largest of these, is 15 metres below mean sea level and is fed by a series of intermittently flowing rivers, including the Finke, the Diamantina and Cooper Creek, which traverse the plains of the north-east, constituting one of the largest areas of internal drainage in the world. To the south of Lake Eyre are Lakes Gairdner, Frome and Torrens, the last named being 240 kilometres in length.

### General Geological Background

The physiography of the State very accurately outlines the geological features, the areas of higher relief being the basement rocks protruding as cores or ridges through the flat-lying younger sediments of the basin areas.

The main physiographic feature is the Kangaroo Island-Mount Lofty-Flinders Ranges arc of hills, which, although of no great elevation, extend over a distance of 800 kilometres. The rocks of this arc, which are predominantly ancient sediments, have been folded and faulted in a spectacular manner providing many classic examples of textbook tectonics; they owe their present prominence to repeated fold and uplift movements throughout geological time. The hills of the chain rise from the coastal plains of Gulf St Vincent to the west, the plains of the Murray River to the east, and the Lake Frome and Lake Eyre plains in the north-east and north. The basement rocks are also exposed to the west of Spencer Gulf, but are more completely levelled off, and constitute a geological shield of greater antiquity than the Mount Lofty arc.

In the far north-west of the State, the ancient basement is again exposed in the east-west trending hills of the Musgrave and Everard Ranges. These ranges form the northern boundary of the Great Victoria Desert which, with the great coastal Nullarbor Plain, covers the western half of the State.

There is thus a broad geological picture of ancient crystalline or partly crystalline folded rocks forming highland chains and provinces, surrounded by relatively young and soft flat-lying sediments which have accumulated in deep troughs and basins during periodic transgressions and regressions of the sea throughout most of geological time.

It is in the hard rock provinces that are found the deposits of minerals and rocks which have played an important role in the industrial development of the State. The basin areas are important as sources of artesian water and are the areas in which important oil and natural gas discoveries have been made.

In general, the younger sediments of the basin areas do not provide good agricultural soils except in the higher rainfall areas of the south and south-east of the State, while the best agricultural lands lie in the hard rock provinces of the Gawler-Barossa-Clare regions of the central ranges where relatively good rainfall is associated with more mature soil conditions.

A more complete discussion on the geology of South Australia was included on pages 3-18 of the South Australian Year Book 1970.

### Seismicity

The most active area of the Australian continent is that of the South Australian seismic zones. The South Australian area has been monitored since 1962 by a small network of stations operated by the University of Adelaide.

The South Australian epicentres occur mainly in two belts, the major one being within the Adelaide Geosyncline and referred to as the Adelaide Seismic Zone. It extends from Kangaroo Island through the Mt Lofty and Flinders Ranges to Leigh Creek in the north. The epicentres generally follow the ranges and also the western boundary of the Upper Proterozoic Sequence and the fold trends in that part of the Geosyncline curving around to the east of Lake Torrens. The other main South Australian seismic zone is on Eyre Peninsula.

A discussion on earthquakes in South Australia was included on pages 18-19 of the South Australian Year Book 1970.

### 1.2 CLIMATE AND METEOROLOGY

In the Southern Hemisphere, because of the extensive ocean areas and the absence of a broad land mass connecting the antarctic with the tropical regions, the southern continents are not subject to the same range of weather extremes that are experienced in northern countries at similar latitudes. The ameliorating effect of this land-sea distribution is particularly noticeable in southern South Australia.

Briefly, the basic features of the South Australian climate are hot, dry summers with relatively mild nights, and cool but not severe winters with most rainfall occurring during the months of May, June, July and August.

### METEOROLOGICAL OBSERVATIONS

Meteorological services throughout Australia are administered by the Australian Bureau of Meteorology and the Regional Office of the Bureau in Adelaide directs operations throughout the State. In South Australia daily weather reporting stations are established at nearly 80 representative localities and there are over 900 rainfall recording stations.

Station weather observations telegraphed several times a day provide the basic information for the weather forecasting and warning services provided by the Regional Forecasting Centre, Adelaide. These observations are also collated in bulletins, maps and reports issued for public information. The reports include climatic surveys which are studies of climatic variations over defined regions of the State.

### RAINFALL

### Average Annual Rainfall

South Australia is by far the driest of the Australian States and Territories with just over four-fifths of the State receiving an average of less than 250 millimetres of rain annually. An indication of the shortage of rain in the State is given in the following table which compares the relative distribution of rainfall in South Australia and in Australia as a whole.

### Distribution of Rainfall, South Australia and Australia

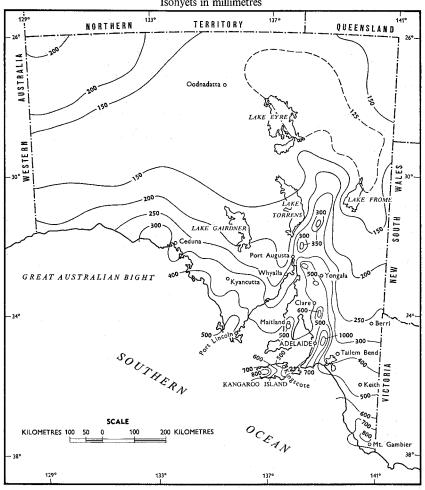
17.01	Proportion of	Total Area	
Average Annual Rainfall	South Australia	Australi	
	Per cent	Per cent	
Under 250 mm	82.6	38.8	
250 mm and under 400 mm	9.1	19⋅8	
400 mm and under 500 mm	4.5	11.2	
500 mm and under 600 mm	2.6	9.5	
600 mm and under 750 mm		7.5	
750 mm and under 1 000 mm	0.4	6.2	
1 000 mm and over	(a)	7⋅0	
Total	100-0	100-0	

<sup>(</sup>a) Less than 0.05 per cent—an area of the order of 750 hectares in the Mount Lofty Ranges.

Over the southern half of South Australia the main source of rain is from showers associated with unstable moist westerly airstreams occurring fairly regularly during winter. The wettest part of the State is in the Mount Lofty Ranges, immediately east of Adelaide in the vicinity of Stirling, where the average annual rainfall is about 1 200 millimetres. The Flinders Ranges have the effect of extending a strip area of higher rainfall well to the north.

### SOUTH AUSTRALIA AVERAGE ANNUAL RAINFALL

Based on all years of records Isohvets in millimetres



As can be seen from the map on page 6 the isohyets generally show highest annual averages along the ranges and southern parts of the coast. Averages fall off rapidly to less than 250 millimetres within 150 to 250 kilometres inland, and then decrease more gradually to below 125 millimetres in the vicinity of Lake Eyre. This area is the driest part of Australia, and there have been protracted periods when the average there has been less than 75 millimetres.

Average monthly rainfalls at seventeen selected recording stations are shown in the table below. The average number of days receiving 0.2 millimetres or more of rain is also shown.

Average Rainfall and Days of Rain: Selected Stations, South Australia

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
				AVE	ERAGE	RAII	VFAL.	L (a) (	millime	etres)			
Adelaide Berri Ceduna Clare Keith Kingscote Kyancutta Mount Gambier Oodnadatta Port Lincoln Port Prire Stirling Tailem Bend Whyalla Yongala	20 17 11 26 19 15 13 18 25 21 15 14 19 39 19 20 22	21 22 15 26 24 18 18 22 34 27 15 19 37 24 25 21	24 11 18 25 22 18 14 20 33 14 17 19 17 43 21 17	44 17 22 48 35 37 22 44 62 10 19 37 29 96 28 18 27	69 28 40 76 56 60 37 64 75 16 26 58 40 143 43 28 37	72 26 40 80 52 73 41 70 77 13 27 74 41 183 40 26	66 24 41 81 54 79 44 66 102 11 20 78 33 161 40 22 40	62 27 39 80 57 65 43 63 92 8 23 67 36 156 41 25 46	51 27 27 71 51 46 32 50 67 10 22 49 34 124 39 25 38	44 24 26 56 44 37 27 42 62 10 23 35 32 99 38 25 33	31 20 21 36 32 24 23 28 45 9 18 23 23 61 28 23 27	26 19 21 30 26 19 20 22 37 12 16 18 21 48 27 21	531 262 321 635 472 491 334 509 711 158 243 487 344 1 190 388 275 373
Adelaide Berri Ceduna Clare Keith Kingscote Kyancutta Maitland Mount Gambier Oodnadatta Port Augusta Port Lincoln Port Pirie Stirling Tailem Bend Whyalla Yongala	433544447333436434	44354445823537534	A' 53354545923537434	VERAC 9 6 10 9 10 7 10 14 2 5 11 6 13 9 5 7	38 10 12 12 14 12 13 17 3 7 15 8 15 12 6 10	UMBEI 15 12 15 13 16 12 15 18 3 7 17 10 17 13	R OF 16 11 12 16 15 19 14 17 21 20 10 19 11 18 13	DAYS 16 10 11 16 15 18 14 16 20 2 9 19 10 18 13 8 13	S OF F 13 7 8 12 12 13 10 12 17 2 6 13 8 15 11 6 9	RAIN  11     7     7     11     11     11     16     3     6     12     7     14     10     8	(b) 8 5 6 8 8 8 7 8 13 3 6 8 6 11 8 5 7	644767561034649645	120 77 85 122 113 129 102 170 30 69 134 79 150 108 65 97

<sup>(</sup>a) For all years of record to end of 1974. (b) Days receiving 0.2 millimetres or more. Other than for Adelaide (see page 16) figures relate to standard 30 year period 1931-1960.

### Seasonal Distribution of Rainfall

Those areas of the State with the higher average annual totals also show a marked winter maximum of rainfall. From November to March the fall is slight, but rarely is completely absent. However, a high rate of evaporation during the summer means that in general these summer rains are not significant from the agricultural point of view. The first significant falls generally arrive during April or May; June, July and August are usually the wettest months, with rains tending to show a marked decrease during September and October.

By contrast, the occurrence of rain over interior districts is quite erratic, but southern parts of the interior still exhibit a discernible trend for winter maxima. Records collected over the years from this northern half of the State show that heavy rains of up to 75 millimetres may occur in any month of the year, but on the other hand at least two or three months without any significant rain at all are experienced practically every year.

### Rainfall Intensity

Long sustained periods of intense rainfall are rare in South Australia. However, occasionally there are very intense falls lasting only a few minutes—for example in Adelaide several falls at a rate of more than 100 millimetres an hour over a five-minute period have been recorded. These would have been thunder-storm rains, and intense falls can cause considerable damage to crops and to light or freshly worked soils.

The most notable falls of rain which have occurred within a period of 24 hours ending at 9 a.m. were at:

Ardrossan (18 February 1946)	206 mm
Carpa, 25 km SW of Cowell, (18 February 1946)	
Hesso, 50 km NW of Port Augusta, (18 February 1946)	187 mm
Wilmington (1 March 1921)	181 mm
Wynbring, 100 km W of Tarcoola, (28 February 1921)	178 mm

Other Yorke Peninsula towns besides Ardrossan also recorded over 175 millimetres on 18 February 1946. These, however, are very much below the 24-hour falls which have been recorded in tropical parts of Queensland and Western Australia. Crohamhurst in Queensland once recorded 907 millimetres in one day, and more than twenty other centres in Queensland have had daily readings exceeding 600 millimetres.

#### Snow and Hail

The occurrence of snow in South Australia is infrequent and is mainly confined to the Mount Lofty Ranges and southern Flinders Ranges. Most falls are very light and do not persist for a very long period because of the relative warmth of the ground. Collated reports of snow in the Mount Lofty Ranges show a total of 128 days of snow experienced over a period of 133 years to the end of 1973. While most falls have occurred during the months June to September, snow has been experienced as early as 25 April (1916) and as late as 3 December (1955).

Hail falls most frequently about the southern coasts and ranges during the winter. Further to the north, hail can be experienced with summer thunderstorms and some of the largest hailstones have been reported from northerly parts of the State. Tornadoes and tornadic squalls are, in almost all cases, accompanied by hail.

#### Floods

Various areas of South Australia are prone to localised flooding. However, most local flooding is associated with intense rainfall, and consequently, is of comparatively short duration. Exceptions have occurred in parts of the south-east and far north of the State where, because of topography and other soil factors, stretches of water can persist for days and even weeks.

Extensive rises in the River Murray levels have at times caused damage to levees and installations along the banks. During 1956, following an excessive snow melt in the Australian Alps, prolonged flooding was experienced in many areas adjacent to the main course.

### **Droughts**

When dry conditions persist over wide areas for long periods of time, drought, the worst of all Australian climatic hazards, is experienced. The worst years in South Australia were 1863-67, 1896-98, 1901-03, 1913-16, 1926-30, 1939-40, 1943-45, 1959-62 and 1965 in the interior, and 1859-60, 1884-86, 1895-98, 1911-15, 1928-29, 1943-45, 1959 and 1967 in the settled areas.

The driest year in terms of actual rainfall was 1967, when an all-time low figure for the year of 257 millimetres was recorded in Adelaide. However, the 1914 drought is generally recognised as being the most severe experienced, and in that year districts where drought was almost unknown were seriously affected. The average wheat yield fell to only 0-09 tonnes per hectare, little more than one tenth of the yield in previous seasons. In places the River Murray was just a series of waterholes.

The northern areas suffer more frequent droughts than areas near the coast. In 1896 the track north-west of Port Augusta was closed to all traffic because of the drought stricken nature of the country. At about this time the drought was particularly severe in the north-east of the State, and this pastoral country was entering its eighth consecutive year of drought before relief rains fell in March 1902.

A more detailed discussion with special reference to rainfall deciles was included on pages 8-10 of the South Australian Year Book 1967. Further details of droughts appear in the Bureau of Meteorology publications Droughts in Australia by J. C. Foley (Bulletin No. 43) and Rainfall Deciles as Drought Indicators by W. J. Gibbs and J. V. Maher (Bulletin No. 48).

### Rainfall Probability

A special article on rainfall probability, i.e. the likelihood, expressed as a percentage, that a minimum rainfall will be received during a stipulated period, was included on pages 6-9 of the South Australian Year Book 1966.

### **TEMPERATURE**

### Seasonal Temperature Conditions

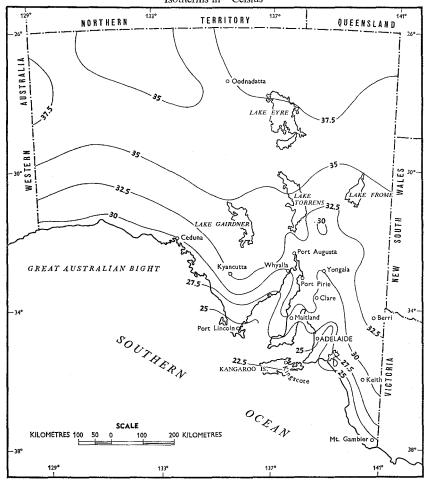
Air temperature is normally recorded under standard conditions in a Stevenson Screen. Isotherms of the average maximum temperatures in a mid-summer month (January) and of the average minimum temperature in a mid-winter month (July) are shown on the maps on pages 10 and 11 respectively. The isotherms are more or less parallel to the coastline but the cooling effect associated with higher altitudes of the Mount Lofty and Flinders Ranges is clearly shown.

From December to February it is generally warm to hot throughout the State but sea breezes frequently bring some relief to the coastal districts. In locations more than 75 kilometres inland maximum daily temperatures usually exceed 32.5°C and are quite often over 37.5°C. In general, areas to the north of the

32.5°C isotherm on the January map average more than 20 days annually during which the maximum temperature exceeds 37.5°C; while it is only on the extreme south-east coastal fringe and Kangaroo Island where the average number of such 'very hot days' is less than five a year. Air masses prevalent at this time of the year are relatively dry; hence cooling during the night is marked—a fall of 10°C to 20°C from day to night is usual.

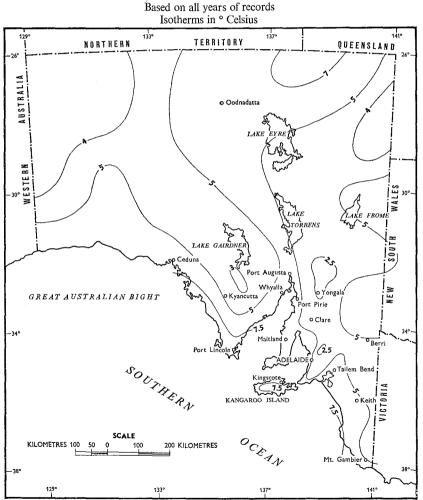
### SOUTH AUSTRALIA MEAN MAXIMUM TEMPERATURE: JANUARY

Based on all years of records Isotherms in ° Celsius



During March temperatures begin to fall and continue to do so during April and May, the first frosts of the year often being experienced during this period. The three coldest months are June, July and August, with the coldest areas along the highlands. In those parts of the State east and south-east of the ranges, the mean temperature for the latter months is near or just below 10°C, and these low temperatures cause vegetation growth to become very slow, although it does not cease altogether.

### SOUTH AUSTRALIA MEAN MINIMUM TEMPERATURE: JULY



In the spring months, September to November, with gradually rising temperatures and longer hours of sunshine, crops and pastures grow rapidly. In this period severe frosts are sometimes experienced and these can cause considerable damage to fruit crops during the bud, flower and small fruit stages. When hot, dry, northerly winds persist over the State for two or more consecutive days, developing crops may suffer stress.

Monthly mean maximum and minimum temperatures at seventeen selected recording stations within the State are shown in the following tables. These are based as nearly as possible on a standard period except for the figures for Adelaide which are based on all years of record.

### Mean Maximum Temperatures: Selected Stations, South Australia

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
						•(	Celsius						
Adelaide Berri Ceduna Clare Keith Kingscote Kyancutta Maitland Mt Gambier Oodnadatta Port Lincoln Port Pirie Stirling Tailem Bend Whyalla Yongala	31·1 28·5 29·3 30·1 23·5 32·9 28·9 24·9 31·9 24·9 24·9	29·4 30·2 27·4 29·0 28·8 23·2 31·8 27·2 23·8 27·2 23·8 24·5 31·3 24·5 31·4 24·3 28·3 28·2 29·5	26·9 28·1 26·6 26·3 22·0 30·1 25·4 22·6 22·8 23·6 22·8 22·8 26·8 26·6 27·1	22·7 22·5 23·7 21·9 19·5 24·9 21·6 27·9 25·2 21·0 24·6 22·6 23·5 21·4	18·7 18·9 20·6 16·9 17·2 21·1 17·4 15·5 22·8 21·2 18·6 20·2 14·4 18·7 20·2	15·8 15·7 18·2 13·4 15·2 17·8 15·7 17·7 16·3 17·7 16·3 17·1 11·6 16·0 17·9 13·4	15·0 15·4 17·0 12·9 14·3 16·9 13·8 12·8 17·1 15·6 16·3 16·4 16·4 12·4	16·4 17·2 18·3 14·6 15·7 14·8 18·4 14·9 12·6 19·1 16·3 17·9 16·6 17·7 13·4	18·9 20·7 21·4 17·5 16·3 21·8 17·5 15·8 26·1 22·6 18·2 21·4 20·0 20·2 17·8	22·1 23·4 23·3 20·8 21·5 18·5 25·2 20·7 17·4 29·7 25·3 19·7 24·6 16·9 22·1 23·3 21·7	25·2 26·8 25·8 22·0 24·2 20·4 28·3 24·2 19·7 28·3 21·4 27·9 24·8 25·3 25·5	27·8 29·7 27·2 27·3 22·1 30·7 25·3 30·5 23·2 30·5 23·2 30·5 23·2 30·6 27·2 26·6 28·3	22.4 23.3 23.2 21.2 21.9 18.9 25.0 20.3 24.4 17.7 22.3 22.9 21.5

### Mean Minimum Temperatures: Selected Stations, South Australia

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
							Celsiu	s					
Adelaide Berri Ceduna Clare Keith Kingscote Kyancutta Mit Gambier Oodnadatta Port Lincoln Port Pirie Stirling Tailem Bend Whyalla Yongala	15·2 14·5 13·8 12·6 14·6 14·1 14·9 10·3 22·4 18·7 15·3 17·1 11·5	16-6 14-9 14-6 13-8 15-1 13-8 14-6 10-9 21-8 18-7 15-5 17-2 11-6 13-6 18-3 12-9	15·1 13·4 12·8 11·4 10·7 14·1 12·2 13·6 9·7 19·0 14·8 15·7 10·6 11·9 16·9 10·8	12·7 10·1 10·3 8·3 9·1 12·2 9·2 11·7 7·8 14·3 12·8 12·5 8·6 13·9 7·2	10·3 7·8 8·5 5·8 7·4 10·6 7·2 9·3 6·8 9·1 11·0 10·2 6·8 8·2 10·3 4·5	8·3 6·1 7·3 4·4 6·3 5·3 7·6 5·4 6·8 7·7 9·4 8·2 5·3 6·3 2·9	7·3 5·3 6·6 3·3 5·1 8·3 4·7 6·8 8·5 7·4 4·6 5·3 2·3	7.8 5.9 6.1 3.9 5.1 4.8 6.7 4.9 7.8 4.8 5.9 7.8 2.1	9.0 7.7 7.7 5.2 6.9 6.1 7.8 5.8 10.9 9.2 9.4 5.9 7.2 9.8	10·9 9·9 9·6 7·3 7·8 10·2 8·3 9·5 6·8 14·7 12·6 10·6 11·6 7·1 8·8 12·1 6·2	12-9 12-1 11-8 10-2 9-4 11-7 10-4 11-5 7-8 18-1 12-2 13-8 8-7 10-7 14-5 9-1	14·9 14·2 13·7 12·3 11·3 13·3 12·7 12·9 9·4 20·8 17·3 13·9 15·8 10·2 12·3 15·9 11·4	11.8 10.2 10.3 8.3 8.6 11.4 9.1 10.5 7.5 14.3 12.9 11.8 12.2 7.9 9.5 12.8

The highest temperature recorded in South Australia was 50.7°C at Oodnadatta on 2 January 1960, and the lowest -8.1°C at Yongala on 16 June 1959.

### HUMIDITY

'Relative humidity' at a particular temperature is the ratio of the actual vapour pressure to the saturated vapour pressure (at that temperature) expressed as a percentage. Since relative humidity depends not only on the actual water vapour content of the air, but also on air temperature, there is a tendency for highest relative humidities to be associated with low temperatures during the early morning hours, and conversely, the lowest relative humidity values tend to occur during the warmest part of the afternoon when measurements of under 20 per cent are not uncommon.

The average index of mean relative humidity has been derived from the ratio of the average 9 a.m. vapour pressure to the saturation vapour pressure at the average mean temperature. Being thus related to the mean temperature this value of relative humidity is a good approximation of the daily mean.

With an average index of mean relative humidity of under 35 per cent in summer increasing to about 50 per cent in winter, the far northern parts of the State experience the lowest values of relative humidity in South Australia. By comparison, most southern parts of the State have an average index of mean relative humidity of about 45 per cent to 55 per cent in summer, increasing to about 70 per cent to 80 per cent in winter.

### SUNSHINE AND CLOUD

The annual average sunshine total (as determined from records of sunshine and average cloudiness) ranges from about 2 000 hours along parts of the southern coastal fringe to 3 500 hours near the northern border of the State. Adelaide has an average of just over 2 500 hours a year.

December and January tend to be the sunniest months with daily averages reaching a maximum of about 10.5 hours over interior districts. During the June and July winter months daily averages are still as high as seven hours in the far north interior, but over the southern coastal fringe the daily average of just over eight hours for summer is reduced to about three hours during winter.

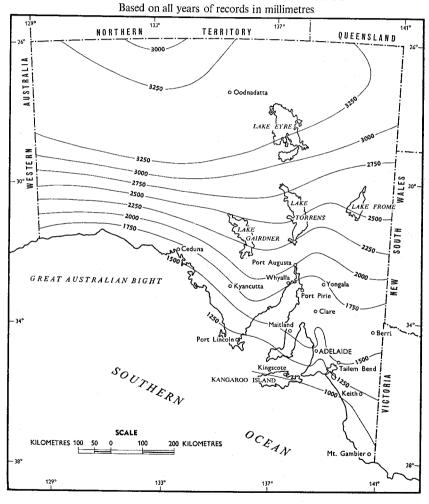
#### WIND

During the summer months winds from the southern quadrants are the most prevalent and a well defined sea breeze is common along the whole of the coastal fringe from October right through to about April and May. During the winter months the north-westerly predominates, but the proportion of west to south-west winds is also relatively high.

South Australia is not subject to the type of sustained wind storms associated with tropical cyclones as in Queensland and tropical Western Australia. However, gales do occur from time to time along the coast during the winter and cause minor damage to buildings and foreshore works. Probably the most noteworthy storm was on 11 April 1948 when wind averaged over 60 km/h for six hours in central and south-eastern districts, the naval frigate Barcoo was grounded at Glenelg and the Glenelg jetty was wrecked. Frequent gusts over 100 km/h and a strongest gust of 130 km/h were recorded in Adelaide.

Most violent wind squalls are associated with thunderstorms and usually last only a few minutes. It was during such squalls that the highest wind gusts were recorded in South Australia—158 km/h at Woomera on 4 November 1969, 148 km/h at Leigh Creek on 3 December 1953 and also at Adelaide on 13 July 1964.

SOUTH AUSTRALIA
AVERAGE ANNUAL EVAPORATION



### **EVAPORATION**

In South Australia most measurements of evaporation have been made with tanks, each 0.91 metres internal diametre and 0.91 metres deep, sunk into the soil so that the rim is only 25 millimetres or so above the surface.

However, early in 1967 a change-over to the standard American Class A pan was made. These pans, 1.22 metres in diameter and 0.3 metres deep, are placed above ground level on wooden stands. As yet there are insufficient years of record to compute averages of the measurements,

The annual average evaporation using the sunken tank method has varied from under 1 000 millimetres along the south-east coastal fringe to more than 3 250 millimetres over a large area around and to the west of Oodnadatta in the far north (see map on page 14). About half the area of the State has an evaporation rate exceeding 2 500 millimetres a year, and this high rate is all the more significant when it is considered that the average annual rainfall over most of the northern half is less than 150 millimetres. A critical survey of the evaporation network and methods of observation, together with tabulations of the results of Australian observations appear in the Bureau of Meteorology publication Evaporation in Australia (Bulletin No. 44).

### CLIMATE OF ADELAIDE

The longest continuous series of weather observations in the Southern Hemisphere started in Adelaide in November 1836 when Sir George Kingston commenced rain gauge readings at his property on the corner of Grote Street and West Terrace. Unfortunately, the earliest figures were mislaid and records are available only from the beginning of 1839. No other regular observations were made until Sir Charles Todd arrived to fill the post of Superintendent of Telegraphs and Government Astronomer in 1856. During the first year or two, observations were made at his private residence in Adelaide and, for some months, in Government House grounds.

In May 1860 the Observatory on West Terrace was completed and the instruments were moved to that site. For over 100 years the observational site at Adelaide has remained practically unchanged. Minor shifts occurred in 1940 and 1962 but these were within 100 metres of the original observatory site.

Temperature records at Adelaide date from 1858 when readings were first taken from a thermometer placed in a screen known as a Greenwich Stand which failed to protect the thermometer fully from reflected radiation. In 1887 a new series of readings using a standard Stevenson Screen was introduced and this showed maximum temperatures during the warmer months to be 1° to 1.5°C lower on average. Other temperatures were not significantly affected. Both screens were in continuous operation until 1948 when use of the Greenwich Stand was discontinued. However, the Greenwich Stand readings remained the official record until 1948, thus there is a slight discontinuity in the temperature records in that year and means are weighted towards the Greenwich Stand method of measurement.

Adelaide is the driest of Australia's capital cities, having less rainfall and a lower relative humidity than any other capital. Summer maximum temperatures are high and the record of 47.6°C in the Greenwich Stand on 12 January 1939 is the highest recorded in any of the capital cities.

### Temperature

In the summer months, Adelaide maximum temperatures frequently exceed 30°C and from time to time 'heat waves', with readings at or near 35°C for several consecutive days, are experienced. The outstanding heat wave was in January 1939 when fourteen days out of fifteen exceeded 30°C and of those fourteen days thirteen exceeded 35°C and six exceeded 40°C. During this heat wave the record temperature of 46.8°C recorded on 26 January 1858 was exceeded, first on 10 January 1939 when the temperature reached 47.2°C and then two days later on 12 January when the highest ever temperature of 47.6°C (46.1°C in the Stevenson Screen) was recorded.

### Climatological Data. Adelaide

### (1) Temperature and Relative Humidity

		Т	emperatu	re		Relativ	Relative Humidity (9 a.m.)			
Month -	Max	rimum	Mir	imum			TT:-1			
монн –	Mean	Highest Recorded	Mean	Lowest Recorded	Mean	Mean	Highest Monthly Mean	Lowest Monthly Mean		
Years of Record	118	118	118	118	118	107	107	107		
	°C	°C	°C	°C	°C	%	%	%		
January February March April May June July August September October November	29·6 29·4 26·9 22·7 18·7 15·8 15·0 16·4 18·9 22·0 25·2	47.6 45.3 43.6 37.0 31.9 25.6 23.3 29.4 35.1 39.4 45.3	16·4 16·6 15·1 12·7 10·3 8·3 7·3 7·8 9·0 10·9	7·3 7·5 6·6 4·2 2·7 0·0 0·2 0·9 2·7 4·9	23·0 23·0 21·0 17·7 14·5 12·1 11·1 14·0 16·5	41 43 47 57 67 75 76 70 61 52 45	59 63 62 72 77 84 87 80 72 67	29 30 29 37 49 63 66 54 44 29 31		
December	27.8	45.9	14.9	6.1	21.3	42	56	31		
Year	22-4	47-6	11.8	0.0	17-1	56	87	29		

### (2) Rainfall and Wind

		Rain	fali			Wind						
Month	Mean	Highest Monthly and Yearly	Highest	Mean Days of	Average	Highest	Prevailing Direction					
	Wican	Total			Speed	Gust	9 a.m.	3 p.m.				
Years of												
Record	136	136	136	136	21	58	58	58				
	mm	mm	mm	No.	km/h	km/h						
January	20	84	58	4	13	116	sw	sw				
February	21	155	141	4	12	106	NE	SW				
March	24	117	89	5	ĬĨ	126	S	SW				
April	45	154	80	10	ĨĨ	130	ÑE	sw				
May	69	197	70	13	īī	113	NE	NW				
June	72	218	54	15	12	108	NE	N				
luly	66	138	44	16	12	148	NE	NW				
August	62	157	57	16	13	121	NE	SW				
September	51	148	40	13	13	ĬĬĬ	NNE	SW				
October	44	133	57	îĭ	13	121	NNE	ŠW				
November	31	113	75	Î	13	130	sw	ŚW				
December	26	101	61	6	13	121	SW	SW				
Year	531	786	141	121	12	148	NE	sw				

### Climatological Data, Adelaide (continued)

(3) Other Conditions

Month	Mean Daily Sunshine	Clear Days (b)	Mean Amount of Cloud (c)	Days of Fog	Days of Lightning	Amount of Evaporation (d)	Vapour Pressure 9 a.m.	Mean Baro- metric Pressure (e)
Years of Record	93	58	107	75	103	97	105	118
	Hours	No.		No.	No.	mm	mb	mb
January	9.9	12.4	3.1	0.0	2.0	236	11.9	1 013-2
February	9.3	10-9	3⋅3	0.0	1.7	191	12.3	1 014-3
March	7.9	10.9	3.5	0-0	1.7	159	11.7	1 017-2
April	6.0	6.6	4.5	0.0	1.4	96	11.4	1 019-8
May	4.8	4.6	5.1	0.4	1.5	58	10-8	1 020-1
June		4.0	5.3	ĭ•i	1.5	37	- ğ.ğ	1 019-8
July	4.3	3.6	5.2	1.3	Î-4	37	9.4	1 019-9
August	5.3	4.9	4.9	0.6	Ĩ·7	53	9.6	1 019-0
September	6.2	5.7	4.6	0.2	Ĩ·7	81	9.9	1 017-6
October	7.2	5.7	4.5	ŏ.ō	2.6	128	10.3	1 016.0
November	8.6	6.6	4.2	ŏ·ŏ	3·ŏ	172	10·4	1 015-1
December	9.4	9·ŏ	3.7	ŏ·ŏ	2.2	219	iĭ·i	1 013.3
Year	6.9	85.0	4-3	3.6	22.4	1 467	10-5	1 017-1

 <sup>(</sup>a) Days receiving 0-25 mm or more of rain.
 (b) With less than two-eighths cloud.
 (c) Scale 0 (clear) to 8 (overcast) at 9 a.m. and 3 p.m. daily.
 (d) From Standard Australian Tank (period 1870-1966).
 (e) Mean of 9 a.m. and 3 p.m. readings corrected to sea-level.

July is the coldest month, when the mean maximum is only 15°C with the extreme lowest minimum recorded in the Greenwich Stand being 0°C (0.6°C in the Stevenson Screen) on 24 July 1908. August is only slightly warmer than July, but after August steadily rising temperatures are experienced during the spring months.

### Rainfall

Adelaide's summer rainfall is light and unreliable. The average monthly fall from January to March is under 25 millimetres and completely rainless months in this period are not uncommon. In fact, each of the five months December to April has at some time been recorded as completely dry, and in the period January to March 1893 there were sixty-nine consecutive rainless days. On the other hand, heavy rain is occasionally experienced at this time of the year and on 7 February 1925 rainfall was 141 millimetres—a record for one day.

Each month from May to September rainfall averages over 50 millimetres and in this period the rain is fairly reliable. June is the wettest month, but the average is still under 75 millimetres for the month.

The 136 year annual rainfall average is 531 millimetres, and annual totals have ranged from a low of 257 millimetres in 1967 to a high of 786 millimetres in 1851.

### Other Conditions

Relative humidity in Adelaide is at its lowest in January when the average 9 a.m. reading (which approximates the average for the whole 24 hours) is 39 per cent. This low value of the relative humidity reduces the severity of heat waves in Adelaide. In fact, the relative humidity is very low for most months of the year, only becoming higher in winter, with the average at 9 a.m. reaching 75 per cent in June and July.

Adelaide is not subject to violent sustained wind storms. The prevailing wind during the day in summer is a south-westerly sea breeze which is well defined throughout the months October to April. Another common wind during summer, known locally as the 'gully wind', blows from the east or south-east out of the Adelaide hills (more particularly at night) and becomes very strong and gusty at times. In winter the prevailing wind during the day is north-westerly with a high proportion of south-westerlies.

### WEATHER CONDITIONS IN SOUTH AUSTRALIA: 1974 and 1975

### Summer 1973-74

Rainfall totals were two to four times normal in nearly all districts, the exceptions being Kangaroo Island and the Lower South East Districts which were only slightly above average.

Widespread hot spells with temperatures in excess of 30°C were common during December but were followed by marked cool changes. Cloudy conditions were responsible for slightly cooler but sultry weather during January and February. Mean summer maxima were within 1°C of normal throughout the settled areas except southern Eyre Peninsula, Kangaroo Island and the Lower South East which graded from 1°C to 3°C above normal, and in the interiors mean maxima were between 1.5°C and 3°C below normal. Mean summer minima were between 1.5°C and 3°C above normal as a result of the combination of northerly airstreams and persistent cloud cover.

#### Autumn 1974

Rainfall totals were from two to five times normal in the Upper and Lower North, Far North, North West, North East, Yorke Peninsula and Murray Districts and from one and a half to twice normal throughout the Western Agricultural, County Light and Upper South East Districts. The Lower South East District was slightly below normal while the other districts were marginally above normal for the season.

Hot spells were frequent and prolonged during March and were in direct contrast to the first half of April. Generally, mean March maxima were 1°C to 3°C above normal and mean April figures were 1°C to 3°C below normal. Minimum temperatures were mainly 2°C or 3°C above normal in the first two autumn months. During May both minimum and maximum temperatures were close to normal throughout most districts although mean May maxima were 1°C to 2°C above normal over Kangaroo Island and in the Lower South East District and below normal by a similar amount in the five northern districts.

### Winter 1974

Rainfall averages were within 10 per cent of normal for most districts. However, the Far North and North East Districts were 16 and 31 per cent deficient, respectively, while the Upper and Lower Murray Districts received 18 and 11 per cent, respectively, above their winter averages. July was by far the wettest month. It was also squally and storms battered many parts of the State on several occasions.

Prolonged warm spells were rare but winter temperatures were consistently slightly above average. Mean maximum temperatures were generally within 1°C of normal throughout the State except in the area of Coober Pedy, Oodnadatta and Marree where they were slightly higher.

Mean minimum temperatures were slightly above normal throughout the South East Districts and up to 1.5°C above normal throughout the remainder of the State. It was a mild winter generally and although some brief cold spells occurred, the accompanying frosts were not severe.

### Spring 1974

The first two months of spring 1974 were extremely wet, followed by a month of very little rain. Adelaide received 70 millimetres of rain in September, 111 millimetres in October and less than 5 millimetres in November. The spring total for Adelaide was 186 millimetres compared to the average of 126 millimetres.

The North West and Far North Districts received very heavy rains in September and October; more than twice the normal in September in both districts and about five times normal in October in the North West and three times normal in the Far North District. In November they were 36 and 85 per cent respectively, below normal. Seasonal averages were 146 millimetres in the North West and 94 millimetres in the Far North Districts which were about three times the normal and one and a half times normal, respectively.

Throughout the Western Agricultural, Upper North, North East and Murray Districts, spring rainfall aggregates were about 50 to 80 per cent above normal with most rain falling during September and October. A similar pattern was reflected throughout the remaining districts but aggregates were only 30 to 50 per cent above normal.

Spring temperatures were below normal by 1°C to 2°C during the day and very close to normal at night at most centres. However, there were some exceptions. In parts of the Flinders Ranges and in Adelaide mean maxima were 2°C to 2.5°C below normal while at most stations on the west coast, south-east coast and Kangaroo Island they were close to normal.

### Summer 1974-75

Little rainfall was recorded in the settled areas during summer and the interior districts reported deficiencies during December and January which were offset by heavy rains during February. The seasonal rainfall recorded in Adelaide was 49 millimetres compared to the long-term summer average of 66 millimetres. Heavy rains in the Far North during February boosted summer rainfall aggregates to about 80 per cent above normal for that District but all other seasonal district averages were below normal. The North West District average was close to normal because it received twice the normal February rainfall. However, the North East District, which also accrued above average rain in February, was about 30 per cent deficient. Most districts in the settled areas reported summer deficiencies of between 40 and 90 per cent.

The heaviest falls in the purely pastoral areas were 166 millimetres at Ilbunga and 157 millimetres at Marree in the Far North District but most totals were between 40 millimetres and 90 millimetres in the Far North and North West Districts while they were mostly between 30 millimetres and 70 millimetres in the North East District. Outstanding gaugings in the settled areas were 114 millimetres at Barton and 105 millimetres at Yalata. However, throughout the remainder of the Western Agricultural District most aggregates were less than 35 millimetres. Amounts of between 35 millimetres and 75 millimetres were fairly general over Kangaroo Island, the Adelaide Plains, the Lower South East and Mount Lofty Ranges, but elsewhere gaugings of less than 35 millimetres were most common and amounts of less than 15 millimetres were gauged throughout the Upper Murray and Murray Mallee Districts.

A hot spell during late January and early February was offset by long periods of slightly below normal temperatures when easterly wind regimes and occasional influxes of southerly air kept nearly all mean maxima and minima to within 1°C of normal. There were few exceptions, but of these Adelaide and Georgetown were noteworthy in that the mean summer maxima were 2.3°C and 1.6°C below normal.

The dry summer followed a month of very little rain and the fire danger caused concern. One large bushfire burned thousands of hectares of grazing land in the North West District. More than forty fires broke out during the hot spell of the first week in February and of these, one on Kangaroo Island burned out nineteen farms and destroyed cattle and thousands of sheep. In contrast to the fires, floods disrupted communications in the interior districts during mid-February.

### Autumn 1975

Districts near the coast received rainfall up to 30 per cent above the autumn normal. However, deficiencies ranged from about 10 to 25 per cent in the Upper North and Murray Districts, and from 33 per cent in the North West to 64 per cent and 85 per cent in the North East and Far North, respectively. The purely pastoral areas recorded below normal rainfall during March, April and May. However, March rainfall totals were above average throughout the settled areas and more than twice the normal March rainfall was received throughout the South East, Yorke Peninsula, Kangaroo Island and the Central Districts. This was in direct contrast to April when all districts received rainfall deficits. During May the inland districts and those east of the Flinders Ranges, except the Lower South East, received below normal rainfall while coastal districts reported above normal amounts for May.

Most stations in the Upper North and Murray Districts received less than 80 millimetres during autumn. Aggregates were generally between 80 millimetres and 120 millimetres throughout the Lower North, Yorke Peninsula and the Upper South East. They mainly ranged from 120 millimetres to 180 millimetres on Kangaroo Island and over the Adelaide Plains, County Light and southern Eyre Peninsula. Falls of between 180 millimetres to 240 millimetres were common throughout the Lower South East. Most of the Western Agricultural District received totals of between 60 millimetres and 100 millimetres while 200 millimetres to 300 millimetres were received at most stations in the Mount Lofty Ranges. The heaviest falls were 442 millimetres at Stirling and 433 millimetres at Uraidla.

A transition from summer conditions to typical autumn weather occurred during mid-March when south-westerly wind regimes were common during the last fortnight. Marked fluctuations in both maximum and minimum temperatures occurred during the first week of April and a pronounced warm spell from 13 to 18 April was largely offset by a cold spell from 22 to 25 April. In May, hot spells occurred on 5 and 6, and 20 to 22 May and, although several days and nights were substantially warmer than normal, May temperatures overall were close to the average. Mean autumn maxima were generally within 1°C of normal. Mean autumn minima were also within 1°C of normal at most centres but a few stations scattered over the State reported mean minima of up to 1·2°C above normal.

Some noteworthy events were recorded; many stations in the Central District received their highest March rainfall totals since 1910. Among those were Adelaide, Stirling and Uraidla. On 12 May, a storm surge with a heavy swell, caused by persistently strong south-westerly winds through the Bight region, washed over a levee at Port MacDonnell. The sea reached more than 300 metres inland, flooding dozens of houses and shops. The surge also caused considerable damage along the Victor Harbor foreshore.

### Winter 1975

Clear skies, overnight frosts and predominantly dry days were experienced throughout June. However, July was characterised by frequent showers and above normal rainfall in most districts. August rainfall was slightly below normal in nearly every district, the only exceptions being the Far North and North East Districts where thunderstorms and heavy rain disrupted surface transport.

Winter rainfall was 10 per cent above normal in the Far North and close to normal in the Lower South East District. It was between 30 and 40 per cent below normal in the Lower Murray and Lower North, and it was from 15 to 30 per cent below normal in other districts.

Most stations in the interiors recorded 30 millimetres to 50 millimetres of rain. In the settled areas amounts of between 20 millimetres and 300 millimetres were common over Kangaroo Island, the Mount Lofty Ranges and the Lower South East District. Light falls of 50 millimetres to 100 millimetres were recorded at most stations in the Upper North and the Murray districts while elsewhere gaugings of between 100 millimetres and 150 millimetres were fairly general.

Mean winter maximum temperatures were from  $0.5^{\circ}$ C to  $1.5^{\circ}$ C above normal at most stations while overnight temperatures were generally within  $1^{\circ}$ C of normal. A hot spell, late in July, produced many record maximum temperatures for that month.

### Spring 1975

Heavy rains flooded roads, railways and airstrips in country areas and the interiors during October. Numerous centres including Kingoonya, Oodnadatta, Coober Pedy and Marree were isolated. However, the rains also boosted cereal prospects in agricultural areas.

All districts received above average spring rainfall. In the Upper Murray, Upper North, Far North, North West and North East Districts most stations

received about two to two and a half times the normal for the season. In the Western Agricultural, Lower North, Lower Murray, Murray Mallee and County Light surpluses of 50 to 100 per cent were general, while in other districts the rainfall was about 20 to 50 per cent above normal. The highest gaugings were taken at Stirling (343 millimetres) and Mount Burr (335 millimetres). Over the Mount Lofty Ranges and parts of the Lower South East District recordings of about 200 millimetres to 300 millimetres were common. Slightly lesser amounts of 175 millimetres to 250 millimetres were general throughout the Lower North, County Light, Kangaroo Island and the remainder of the Upper South East District. Gaugings of between 125 millimetres and 175 millimetres were recorded elsewhere except in the Far North and North West interior districts where variable amounts of about 50 millimetres to 150 millimetres were recorded.

Mean spring maximum temperatures were generally within 1°C of normal, but persistent cloud cover resulted in overnight temperatures which were about 1°C to 2°C above normal for the most part.

### 1.3 NATURAL RESOURCES

### MINERALS

Barite (barytes) occurs throughout the Adelaidean rocks; in the Mount Lofty and Flinders Ranges in Willyama Complex rocks at Olary, and elsewhere. The Oraparinna area in the Flinders Ranges is the largest producer of high grade barite in Australia.

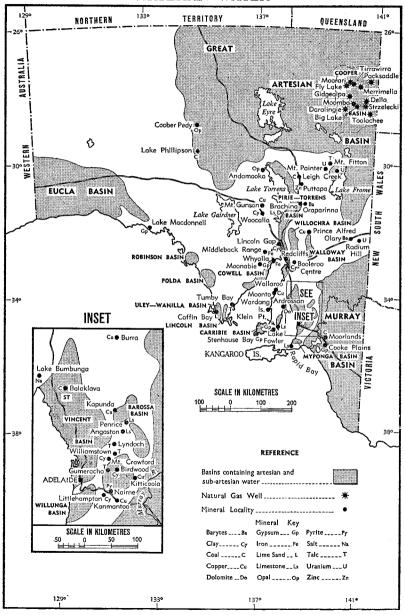
The largest part of Australian reserves of gypsum are located in South Australia. The deposits have in general formed in coastal basins, the largest of these occurring at Lake MacDonnell and on Kangaroo Island. The gypsum deposits at Stenhouse Bay are now exhausted and mining operations have ceased. Other deposits, mainly of seed gypsum, are found inland at Moonabie, Lake Fowler, Cooke Plains and along the River Murray.

Conditions in South Australia are ideal for the production of salt from sea water by solar evaporation. Large solar salt works are located at Dry Creek (near Adelaide), Port Price (Gulf St Vincent), and Whyalla. Salt is also harvested from several saline lakes, in particular Lake Bumbunga and Lake MacDonnell.

The opal fields at Coober Pedy and Andamooka supply a very large proportion of the precious opal produced in Australia. The estimated value of raw opal production in South Australia exceeded \$15 million in 1975. Most of this is exported to Hong Kong, Japan, the USA and Germany.

Iron ore, South Australia's most important mineral is mined in the Middleback Ranges of upper Eyre Peninsula. These ranges lie to the west of Whyalla, a coastal port with a steelworks and shipbuilding facilities, and extend discontinuously from Iron Knob in the north to Iron Duke nearly 65 kilometres to the south. In excess of 147 million tonnes of ore have been mined since 1900. Currently production is at the rate of 13 million gross tonnes per annum with a waste to ore ratio of 3.3:1.

### SOUTH AUSTRALIA MINERAL RESOURCES AND ARTESIAN WATER



Copper ore, which was a major income earner for South Australia from the 1840s to the 1920s, is again becoming an important contributor to the economy as the result of increased exploration by the Mines Department and private industry. Copper ore is being mined at Kanmantoo, Burra and Mount Gunson by open-cut mining methods. Kanmantoo Mine is 55 kilometres southeast of Adelaide and is being mined at the rate of 870 000 tonnes of 1 per cent copper ore a year. The Mount Gunson Mine is 145 kilometres north-west of Port Augusta and 56 kilometres south-east of Woomera and is being mined at the annual rate of approximately 500 000 tonnes of ore of more than 2 per cent copper. Both mines export copper sulphide concentrates. The Burra Mine is 161 kilometres north of Adelaide and has the treatment capacity for approximately 300 000 tonnes of ore per annum of 1.5 per cent copper. The copper oxide produced at Burra is a premium product and is used for the production of fertilisers, agricultural chemicals and copper sulphate.

High grade zinc ore is being mined at Puttapa 30 kilometres south of Leigh Creek.

Substantial deposits of uranium have been discovered but no mining has commenced.

Permian sub-bituminous coal has recently been defined by drilling at Lake Phillipson, 80 kilometres south of Coober Pedy. The deposit consists of a number of seams in two main elongate troughs which together total approximately 2 000 million tonnes, the largest of South Australia's known deposits. Leigh Creek (Triassic) and Inkerman (Tertiary lignite) deposits are held by the Electricity Trust of South Australia, and together these total 1 000 million tonnes. All other known coal deposits near the surface are tertiary lignites and their combined total is less than 1 000 million tonnes. Leigh Creek is the only deposit which is being mined at present and to date approximately 31 million tonnes of coal has been mined for power generation at the Playford Power Station in Port Augusta. Large deposits occur in both the Cooper Basin and Pedirka Basin but these are very deep (1 000-2 000 metres). An in situ process is most likely for the utilisation of this coal and, in the case of the Cooper Basin, no mining can be attempted before the gas or oil is depleted from the structure.

A special article on the Minerals of South Australia was included on pages 21-39 of the South Australian Year Book 1975.

## PETROLEUM RESOURCES

Before the late 1940s South Australia had no satisfactory indigenous source of primary energy. A number of deposits of sub-bituminous coal including those at Leigh Creek, Moorlands, Balaklava and Lake Phillipson were known but none of these were considered worthy of development.

Industrial unrest in the late 1940s led to a growing awareness of the State's dependence on eastern States coal and foreign oil and led to the development of the Leigh Creek coalfield.

The search for petroleum was actively encouraged and assisted from the mid-1950s. This culminated in the discovery of the Gidgealpa gas field in 1963 by Santos Limited and the then Delhi Australian Petroleum Limited.

The building of a pipeline to supply this natural gas to Adelaide was considered not to be feasible at the time but further exploration resulting in the discovery of the Moomba, Daralingie and Toolachee fields made it an economical proposition. The pipeline was constructed and came into operation late in 1969.

There was a revival of petroleum exploration activity in the very early 1970s as a result of a number of farmouts being negotiated for various areas of the Cooper Basin. Following further gas discoveries an agreement was made with the Australian Gas Light Company Limited to supply gas to the Sydney area, conditional upon the discovery and proving of sufficient gas to meet their requirements and needs over a 25 year period. The required amount of gas was shown to exist by late 1972 with the discovery of three new gas fields namely Tirrawarra, Moorari and Fly Lake.

Total reserves of petroleum are estimated to be 100 000 million cubic metres of natural gas and 50 million cubic metres of petroleum liquids.

Legislation was passed to expand the role of the Pipeline Authority of South Australia (PASA), formerly the Natural Gas Pipeline Authority of South Australia, to become the buyer of gas at the Cooper Basin gas treatment plant at Moomba and the seller of gas at the city gate. PASA has negotiated contracts for increased supplies of gas to Adelaide; its former role was as a transporter of gas only.

Natural gas is an important source of energy for direct use in heating and for electricity generation but it is unlikely that any further electricity generation development will be contemplated using natural gas as a fuel. Rather, this development will be based on the use of sub-bituminous coal from Leigh Creek in the short-term and, in the slightly longer-term, from the Lake Phillipson deposits.

#### UNDERGROUND WATER

South Australia is not endowed with a generous rainfall. Only the southern portion of the State, approximately that part south of Port Augusta, receives more than 250 millimetres of rain annually and of this, only quite small areas of the South East and the Adelaide Hills have an annual rainfall exceeding 600 millimetres. The northern part of the State, comprising approximately three-quarters of the total area, is largely arid with an average annual rainfall of less than 250 millimetres. As a consequence South Australia is notably deficient in rivers. There is only one large permanent river, the River Murray, flowing through it while the few streams commencing in the Flinders and Mount Lofty Ranges are short, and seasonal in flow.

Water supply for the metropolitan area of Adelaide is derived from reservoirs in nearby ranges and from the River Murray. Reticulation of surface supplies now covers most of the Adelaide Plains, Yorke Peninsula and portions of Eyre Peninsula (see map 366). In addition there are a number of small areas whose reticulated supplies are derived from groundwater sources by means of bores.

Groundwater suitable for various purposes is available in many areas. Pressure water, also referred to as artesian water, is generally confined to the several sedimentary basins located throughout the State. The largest of these, the Great Artesian Basin, 1 700 000 square kilometres in area, of which 310 000 square kilometres lie in the north-east part of South Australia, covers nearly one-third of the State. The intake area for the principal water-bearing bed lies along the western margins of the highlands in eastern New South Wales and Queensland and natural outlets for the water are mound springs which, in South Australia, lie to the west and south of Lake Eyre. Deep bores are necessary to tap these waters and very large flows have been obtained. However, the water is generally too saline for any form of irrigation and its use is confined to stock watering.

The Murray Basin covers 73 000 square kilometres in South Australia and extends into Victoria and New South Wales. The southern and central portions of the Basin contain waters suitable for all purposes while the water quality deteriorates steadily in a north and north-westerly direction from the southern intake area. Very large yields can often be developed from the bryozoal limestone aquifers at shallow depths and also in some places from sand dune and other local aquifers. Groundwater is used to supply the towns throughout the southern area and is also developed for irrigation and stock. At Padthaway near Naracoorte increasing use is being made of flood irrigation from a high-yielding shallower aquifer for vines and pastures.

The Eucla Basin in the south-west of the State lies partly in South Australia and partly in Western Australia. However, because of the low fertility of the area the Basin is of little importance although some of the water, which is of poor quality, is used for watering stock.

The Adelaide Plains Basin is part of the larger St Vincent Basin, lying between the Mount Lofty Ranges and the shores of Gulf St Vincent. Good quality water is obtainable in certain portions of this Basin; it is heavily used for market gardening on the northern Adelaide Plains. The danger of serious depletion of the aquifers by overpumping in this area has been recognised and use is now subject to government control. In the Adelaide metropolitan area groundwater is used from time to time to supplement reticulated reservoir water. Bores constructed for this purpose have yielded up to 70 megalitres a day.

The Pirie-Torrens Basin is a long narrow basin lying west of the Flinders Ranges between Port Broughton and Port Augusta and extending north to the northern end of Lake Torrens. The variable quality of the water from this basin, however, limits its use mainly to stock watering. The high salinity of the Cowell Basin on the west coast of Spencer Gulf causes it to be little used and of minor interest only. Several small basins, Walloway, Willunga, Myponga and others are utilised to various extents for stock and pastoral uses.

Groundwater outside the well-defined sedimentary basins is often available in useful quantities but its location is not so readily defined. Many bores in folded rocks of the Mount Lofty Ranges and elsewhere provide water supplies for towns, farms and for domestic purposes. Much of the extensive water reticulation of Eyre Peninsula is derived from shallow groundwater basins; Lincoln Basin, Uley-Wanilla Basin and Polda Basin together yielding more than 13 megalitres a day.

It is estimated that the usage of underground water in South Australia exceeds 600 megalitres daily for all purposes. The exploration for, and development of, underground water resources is a continuing responsibility of the South Australian Department of Mines which provides the services of geologists and an extensive drilling organisation.

## General

SOILS

There are many kinds of soils in South Australia ranging from free-flowing sands such as the coastal dunes, to the shrinking and swelling clays of which good examples are found near Bordertown and Tanunda, while some show a marked textural contrast with depth, such as the sand over clay soils of the South East. Not only do these soils differ in their visible attributes, such as their colour, texture, stoniness and degree of slope, but also in the properties, largely unseen, of their chemistry, their relations to air and water, and to the microorganisms which form the soil flora and fauna.

Undoubtedly the most widespread deficiency is phosphorus—low phosphorus contents are typical of South Australian soils. The gravelly ironstone soils of Kangaroo Island and parts of the Adelaide Hills are among the most impoverished in the world, containing only between 5 and 40 parts per million of phosphorus in their surface soils, whereas the red-brown earths in their natural state contained 200 to 300 parts per million. These figures do not compare favourably with those for the soils of Great Britain, in which 600 parts per million of phosphorus is common. However, soils are changed by the treatment they receive and the phosphorus content of soils in some areas has been so built up over the years that its residual effect is now sufficient to produce a good cereal crop without the further addition of superphosphate.

On the other hand, prolonged clean cultivation in vineyards and frequent cropping in wheatland areas causes deterioration of the structure of surface soils and depletion of nitrogen. The latter deficiency can be remedied by the proper use of legumes, such as medics and clovers, during the pasture phase of the crop rotation in wheatlands. Nitrogen is one of the most mobile of the nutrient elements in soil and is highly susceptible to differences in management.

Some soils which seem to be unique to Australia, such as the mallee soils or calcareous earths, are well represented in this State. The irrigated horticultural settlements established on these soils along the River Murray have been notably successful, but where dry land arable farming is practised these soils are susceptible to wind erosion.

There are other important features that affect plant growth, such as acidity and alkalinity, supply of trace elements and so on. Information about these and their importance in different localities can be obtained from the South Australian Department of Agriculture and Fisheries and in a bulletin published by the Department entitled Soils of South Australia's Farm Lands. The extent of country covered by the different soil groups is illustrated by the Atlas of Australian Soils which is being compiled by the Division of Soils, Commonwealth Scientific and Industrial Research Organization (CSIRO). The first sheet of this Atlas, published in 1960, includes the areas of higher rainfall country in South Australia and refers to the many soil surveys made in this State.

A special article on the Soils of South Australia was included on pages 21-31 of the South Australian Year Book 1969.

## **Building Soils**

The building soils of Adelaide and environs are of varying qualities as to stability and bearing capacity. In certain locations shrinking and swelling soils have resulted in considerable foundation failures. These soils, commonly known as Bay of Biscay soils, occur at their worst in areas adjacent to the Mount Lofty Ranges. The best building soils are found in areas along the coast and in a small area to the east of the city.

## 1.4 FLORA AND FAUNA

### FLORA

A broad division of vegetation types is formed by Goyder's Line which represents approximately the 250 millimetre annual isohyet. To the north of the Line, in the Eremaean Province, lies about 80 per cent of the State, experiencing arid to desert conditions where short, erratic growing seasons prevail. Areas to the south, in the temperate region, have climates geared to an equable seasonal cycle of winter rainfall and summer drought.

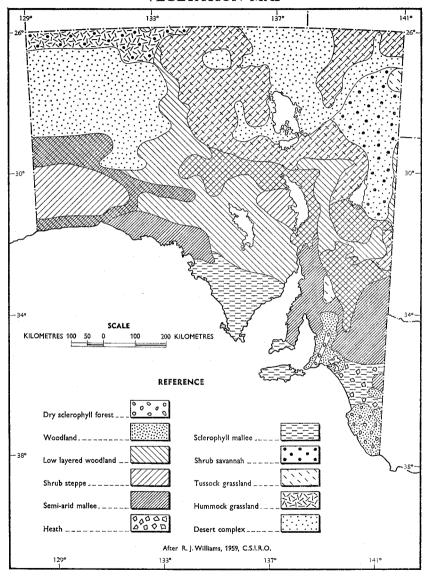
#### Eremaean Areas

These vast areas of inland South Australia are not well known botanically. Vegetation ranges structurally from low layered woodland, through shrub savannah, to exceedingly sparse vegetation of very low stature (shrub steppe). As in arid situations elsewhere throughout the world, therophytes are well represented and after rain these may transform the scene with prolific but transient The woody perennial vegetation is of genera adapted to the dry Predominant trees and shrubs are frequently species of Acacia conditions. (mulga, myall, ironwood) Cassia, Grevillea etc. but other genera (Hakea, Myoporum, Casuarina, and less frequently Eucalyptus) are often involved. Some species such as the desert oak achieve a stature comparable with large temperate zone trees. Chenopod shrubs (Blue Bush, Salt Bush) are often prominent in the shrub stratum, and Triodia (Porcupine Grass) in the herbaceous cover, but there is considerable diversity in the Eremaean flora. The development of cattle and sheep grazing industries and overstocking for long periods and especially in times of drought has led to the depletion of, and alteration to, much of the vegetation of this area.

#### Temperate Areas

In general, vegetation characteristics of the temperate zone of South Australia succeed each other in a fairly predictable sequence from the highest to the lowest rainfalls. Under the high and intermediate rainfalls (about 750-1 000 millimetres) dry sclerophyll forest is well developed, particularly in the Mount Lofty Ranges, where it constitutes a western outlier of the dry sclerophyll forest system occurring in eastern Australia. Eucalyptus obliqua and Eucalyptus baxteri predominate, but other species such as Eucalyptus rubida (the candlebark) are sometimes prominent. Such forest is replete with lesser trees Acacia melanoxylon (black-

# SOUTH AUSTRALIA VEGETATION MAP



wood) at a lower canopy level and a rich array of sclerophyllous shrubs and sub-shrubs beneath. Most species have generic analogues in equivalent dry sclerophyll forests of both eastern and western Australia. Sclerophyll forest in South Australia has been cut over extensively and is being invaded by aliens. Lower rainfall areas down to about 400 millimetres per annum support mainly savannah woodlands and layered woodlands with South Australian bluegum (Eucalyptus leucoxylon) and peppermint gum (Eucalyptus odorata) as predominant trees. Associated trees include river redgum (Eucalyptus camaldulensis) especially along river and creek frontages, sheoak (casuarina spp.), and manna gum (Eucalyptus viminalis). In these vegetations the grass stratum is expressed and the shrub stratum rather suppressed. These vegetations are now almost entirely replaced by agricultural areas.

In some places on the lower rainfall extreme of the temperate zone, variant vegetations occurred. These included substantial conifer (callitris spp.) and conifer-eucalypt forests and woodlands (particularly in the Flinders Ranges), and areas of pure savannah, as once occurred about Burra.

The simple division of the State into Eremaean and temperate areas needs qualifying on two counts:

- (i) Heath. Certain higher rainfall temperate areas do not support the expected vegetation as a consequence of limiting soil fertility. The Coonalpyn Downs area is an example. Here low nutrient dune fields are superimposed on the landscape and support only a heath vegetation where the rainfall regime is suitable for woodland. Such 'light land' is the scene of contemporary agricultural expansion.
- (ii) Mallee. Intercalated between the Eremaean and temperate systems proper, there is developed in South Australia extensive mallee vegetation, dominated by eucalypts, the various stems of which all rise from underground lignotubers. The term 'mallee' refers both to eucalypt species exhibiting this growth habit, and to vegetation dominated by such species. Mallee vegetation is associated in its temperate reaches with heath, and in its Eremaean extensions with various vegetation types.

A more detailed description of the vegetation was included on pages 26-37 of the South Australian Year Book 1967 and should be referred to for a description of the plant species included in the vegetation formations shown in the map on page 29 of this issue.

#### **FAUNA**

South Australia, centrally situated and sharing borders with every other mainland State, is in a sense the zoological cross-roads of the continent. A number of typically western, eastern, and northern species extend to some point within the State, which has few species that are uniquely South Australian.

Only 7.8 per cent of South Australia—a fragmented, southern fringe—is favoured with an annual rainfall of 400 or more millimetres; more than 80 per cent receives 250 millimetres or less. The moister areas are restricted mainly to three peninsulas, to Kangaroo Island and the extreme south-east, and these are divided by gulfs, straits, and stretches of drier country. Further north, the semi-arid to arid zone is deeply cut into and split by Spencer Gulf and the central

highlands. Because of this geographical background the distribution of South Australian fauna, notably of birds and reptiles, is very complex.

Highly developed agriculture in the limited favourable areas and the widespread pastoral occupation beyond have depleted the fauna, particularly the mammals. A series of national parks and reserves is being established which will preserve samples of the various habitat types and, it is hoped, their indigenous fauna. The National Parks and Wildlife Service controls over 3 million hectares on the mainland (see Part 6.4), and administers the Flinders Chase Reserve (549 square kilometres) on Kangaroo Island which is free from the introduced fox.

The land mammals of South Australia at the time of European settlement numbered about 90 species—some 38 per cent of the total Australian mammal fauna. The two monotremes have survived; the spiny ant-eater is wide-spread but nowhere common, while the platypus (once found in the River Onkaparinga as well as in the River Murray) is extremely rare except where it has been introduced in Flinders Chase. The marsupials have been affected most severely; more than a quarter of the 50 or so species are now extinct in South Australia although a number of these survive beyond the State. Originally the marsupial fauna was relatively rich with some 45 per cent of the total number of Australian species represented.

Marsupials that are still common are the brushtailed possum (Trichosurus vulpecula) and the western grey kangaroo (Macropus fuliginosus). In the dry interior the red kangaroo (Megaleia rufa) at times greatly increases in numbers, probably because of changes caused by livestock grazing and the provision of extra water. Today South Australia is almost the sole custodian of the hairynosed wombat (Lasiorhinus latifrons) which is still numerous in the far west of the State but elsewhere the species has been reduced to a few small isolated colonies.

Of the native placental mammals possibly one of the 15 or so species of bats and three or four of the 18 rodents have become extinct.

A special article on the mammals of South Australia was included on pages 42-9 of the South Australian Year Book 1970.

About 400 of the 700 species of Australian birds have been recorded in the State, a number that includes 40 or more vagrants and non-breeding visitors. Many species have declined greatly since settlement but probably not more than two have become extinct. The diminutive Kangaroo Island emu disappeared soon after the European settlement and the night or spinifex parrot (Geopsittacus occidentalis) is probably extinct in South Australia.

Many species of birds can be observed close to Adelaide in the Mount Lofty Ranges and on Kangaroo Island. Mallee areas with their lower rainfall are moderately rich in bird life although the removal of native flora has caused the disappearance of many in certain districts. Within the State may be found the boundaries between numerous western and eastern species and sub-species of birds.

A special article on the birds of South Australia was included on pages 28-40 of the South Australian Year Book 1972.

Well over 100 species of reptiles have been recorded. Of the few that are peculiar to the State, the white dragon lizard (Amphibolurus maculosus) found on the salt-encrusted margins of Lake Eyre and other inland playas is of particular interest. Undescribed species of lizards are known to occur in the Flinders Ranges. A special article on the reptiles of South Australia was included on pages 32-42 of the South Australian Year Book 1973.

The nineteen species of frogs include one that is restricted to the State. This number is only 16 per cent of the Australian frog fauna (123 species) and reflects, in large degree, the predominantly arid nature of the State.

Marine and freshwater fishes number about 390 species—not a very rich fauna for a State with a coastline of 4 000 kilometres. There is, however, an abundance of certain species of economic importance. A special article on the freshwater fish of South Australia was included on pages 27-34 of the South Australian Year Book 1971.

#### INSECTS OF SOUTH AUSTRALIAN HOMES AND GARDENS\*

When the number of species of insects present in South Australia is finally known, this section of the State's fauna is likely to number almost 30 000 species. As it is not practicable to give a concise, or even a short generalised, account of a group as large as this, this discussion is restricted to those most likely to be seen by the average person. Only a few of the insects encountered can be rated as pests; a number are beneficial and others are of considerable interest simply to behold.

Because of the economic benefits or disadvantages of insects of agricultural importance, they receive a lot of attention and well developed lines of communication now exist between the man on the land with an insect problem or query, and those able to help him. He can make his problem known to the extension services of the Department of Agriculture and Fisheries or the Woods and Forests Department. Both extension services are advised by economic entomologists employed in those Departments who also do some extension work and examine many problems at first hand. They in turn can call on entomologists in the Department of Entomology of the Waite Research Institute of the University of Adelaide, the CSIRO Soils Division at Glen Osmond, the CSIRO Division of Entomology in Canberra and the South Australian Museum for back-up opinions and identifications, and sometimes for basic research.

This element of our insect fauna, though of great economic importance is not the one most of us are likely to encounter.

Whether residents of the country, country towns or the city, most people live in a house or a flat and many have a garden attached. This immediately

<sup>\*</sup>Contributed by G. F. Gross and E. G. Matthews, South Australian Museum.

establishes two environments which, though different from each other, do not vary a great deal from one climatic zone to another. Houses or flats are usually solidly built and show a lesser range of temperature and humidity fluctuations than outside; this range may be further lessened by heating in winter and/or cooling in summer. The surrounding gardens are sheltered from the more severe winds by trees and shrubs; some native, some introduced. Gardens, also, are watered frequently during the period of the mediterranean-climate type summer and remain oases of green throughout the year. In each of these two environments there occurs an assemblage of insects, some native which have benefited from the improved conditions, others introduced and usually dependent on the introduced plants which replace the native or agricultural formations.

Unfortunately the avenues available for the householder to seek information and assistance are not so obvious or well defined as for the man on the land. The following general rules should be followed to seek assistance on what it is that interests or concerns you in your home or garden.

- (i) If it is attacking trees which are also grown as commercial forests (e.g. Pinus radiata, some gum trees) contact the entomologist at the Woods and Forests Department.
- (ii) If it is attacking garden vegetables or fruit trees contact the Department of Agriculture and Fisheries.
- (iii) If these organisations cannot assist, or if the insects (or other creatures for that matter) are attacking ornamentals and other plants which are not also grown commercially as agricultural or forest crops, contact the Information Service of the South Australian Museum.
- (iv) If there is a severe fly or mosquito problem or more personal problems such as fleas and lice, then contact the health officer of your local council or the Department of Public Health. The South Australian Museum will also assist if the problem is localised to one or a few adjacent households or members of a family but it cannot handle widespread insect plagues.
- (v) If you simply require to know what it is that you have seen or caught contact the Information Service of the South Australian Museum.

## Insects in the House

Food for insects in houses derives from seven principal sources: (1) stored or spilled human or animal food; (2) fibre (clothing, paper and carpets); (3) wood; (4) pot plants; (5) man, domestic animals, rodents, and birds; (6) garbage and faeces; and (7) water containers.

The house offers a fairly uniform tropical environment and contains much the same inhabitants, both legitimate and unintentional, throughout the world. This uniformity is brought about by man's commerce, which provides opportunities for the wide dispersal of man-associated (synanthropic) animals and plants.

Only the insects falling in categories (5), (6) and (7) above are potentially dangerous to human health, and nearly all of them can be controlled through hygiene rather than pesticides. Since the pesticides themselves are more dangerous to health than the pests, it is best to avoid their use in houses altogether except as a last resort.

Stored or Spilled Food

Milled grains, cereals, nuts, peas and biscuits are very attractive to certain small cosmopolitan beetles (incorrectly called 'weevils' in the old days) and moths. Among the commonest in South Australia are the flour beetles (Tribolium spp.), saw-toothed grain beetle (Oryzaephilus surinamensis Linnaeus), cigarette beetle (Lasioderma serricorne Fabricius), drug-store beetle (Stegobium paniceum Linnaeus), Mediterranean flour moth (Ephestia kuhniella Zeller) and Indian meal moth (Plodia interpunctella Hübner). The granary and rice weevils (true weevils) (Sitophilus spp.) are sometimes encountered. Mouldy grain will support another small beetle, Typhaea stercorea (Linnaeus). All these insects have much the same life history, with a pale grub or caterpillar stage lasting four to seven weeks or longer, depending on the temperature, and an adult which is either a small brown beetle or a small brownish moth with a weak flight.

Foods containing more animal matter, and particularly dead rodents and insects overlooked in a corner of the pantry, will harbour spider beetles (Mezium affine Boieldieu), museum beetles (Anthrenus verbasci Linnaeus), carpet beetles (Attagenus piceus Olivier), larder beetles (Dermestes spp.), the ham beetle (Necrobia rufipes De Geer) and the cheese skipper (a fly) (Piophila casei Linnaeus). Many of these will also appear in bird and rodent nests,

Then there are the omnivores which do not depend so much on concentrations of food, but can roam widely, nibbling at bits of exposed or spilled food here and there. These include cockroaches (particularly the cosmopolitan Periplaneta americana Linnaeus, Blatta orientalis Linnaeus, Blatella germanica Linnaeus and the native white-edged Melanozosteria communis Tepper), silverfish (Ctenolepisma spp.) and ants. Small ants of the genera Pheidole, Irdomyrmex and Monomorium are common in houses during the summer feeding on spilled sugar and other food. Insecticide sprayed in a swath across their point of entry into the house will often act as a barrier against these ants.

Precise identification of the insects in this category will not help the house-holder with his problem. Strict pantry hygiene is the best remedy for all of them. Foods not to be eaten within a short time should be kept in sealed containers, while all spilled food should be cleaned up and dead animals removed.

#### Fibre

Clothing and carpets containing wool are very susceptible to attack by clothes moths (*Tinea pellionella* Linnaeus and *Tineola bisselliella* Hummel) and carpet beetles (*Attagenus piceus* Olivier). The moth larvae are small (up to 8 mm), pale grubs which either spin some loose webbing in the clothes or enclose themselves in a silken case which they drag about. The adults (which do not eat) are small moths about 10-15 mm long and of a uniform pale colour. These are the only moth species that will eat clothes; any larger or darker moths in the room or closet will probably just have flown in accidentally. The large granny moth, *Dasypodia selenophora* Guérin, with prominent eyespots on its forewings, is a frequent visitor in houses; its larva feeds on *Acacia*.

The carpet beetle has a small (up to 12 mm), brown, and very hairy larva, while the adult is all black and small (4-8 mm long). The museum beetle mentioned above, sometimes also found in carpets, is even smaller. Many of the 'carpet' beetles brought in for identification are in fact harmless carabid,

scarabaeid, and tenebrionid beetles which enter the house when attracted by light. Frequent cleaning of clothing and carpets is the best control measure for these pests.

Paper and books are subject to attack if they are stored in a damp situation. Mould forms and this supports large numbers of book lice (*Liposcelis*). These are extremely small (1-2 mm), pale, and do resemble lice, although they are harmless. Cockroaches, silverfish, and (if the paper is stored for a long time) termites will also get into books and papers. The remedy is simply to keep the paper dry.

#### Wood

The structural wood of houses and sheds is subject to attack by termites, particularly if the builder has been careless enough to allow rotting roots of trees to remain under the house or has allowed the structural wood to remain in contact with the soil. Removal of other dead trees and wood from the garden will reduce the chances of termite infestation in the house or shed. However, even wood separated from the soil by stone or concrete can be attacked by these insects if they can bridge the gap with shelter tubes, which are often difficult to spot. The use of resistant wood, such as jarrah, helps, but is usually confined to the basic frame of the house. The few termites which have successfully colonised built-up areas are subterranean and belong to opportunistic species with populous colonies and long-range tunnelling and foraging behaviour. Coptotermes acinaciformis (Froggatt) is the number one pest in South Australia. Many termite species found in natural environments will not invade houses for one reason or another. If the house is actually invaded by termites, professional advice from a pest control firm should be sought.

The wood of furniture will be attacked by beetles of various families: powder-post beetles (Lyctidae), death-watch beetles (Anobiidae), auger beetles (Bostrychidae), and jewel beetles (Buprestidae). Nearly all of these will infest the timber while it is still in the saw mill or timber yard (or before), and by the time the householder notices the round emergence holes it is too late to do anything about it. Some beetles, patticularly buprestids, will live for many years in furniture before emerging.

Fumigation of the infested items in a sealed chamber is the only practical control measure, and should be carried out automatically in the case of imported wooden objects, especially those brought in from the tropics.

Lyctus beetles will sometimes infest house timbers in the Adelaide region, and may affect wood which termites cannot get to as the beetles do not need a soil connection.

#### Pot Plants

The soil of pot plants frequently contains maggots of the fly family, Sapromyzidae. The swarm of small slender flies which emerges and suddenly appears on the inside of the window panes often mystifies the householder.

#### Parasites of Man and Animals

The most common parasites in South Australia are cat and dog fleas (Ctenocephalides spp.). If abundant, they will bite humans but will not stay on

them. The flea larva is a very small, slender maggot which lives on the floor in areas frequented by dogs and cats, preferring carpeted areas which have not been cleaned of hairs, bits of skin, dried blood, etc. on which the larvae feed. Hygiene is the best control of flea larvae, while adult fleas on pets can best be controlled by cyothioate cholinesterase inhibitor drops in the food. A heavy infestation in the house is difficult to eradicate, as fleas can live for a long time without food. The human flea, *Pulex irritans* Linnaeus is now rarely found in South Australia.

Human head and body lice (*Pediculus* spp.), crab lice (*Phthirus pubis* Linnaeus) and bed bugs (*Cimex lectularius* Linnaeus) have become rare insects in South Australia, since they can be controlled by elementary personal hygiene. Bird lice, on the other hand, are common in nests in the roof, but will not affect people. Unlike true lice, which suck blood, bird lice have chewing mouthparts and will normally feed on feathers, but some will also pierce the skin.

Rats harbour various fleas, including the notorious Xenopsylla cheopis (Rothschild), however, bubonic plague is absent in Australia. Various other fleas, including the native stickfast fleas (Echidnophaga spp.) and lice may occasionally overflow from various animals on to man briefly, causing irritation.

## Garbage and Faeces

This is the domain of the filth flies (Muscidae, Calliphoridae, and Sarcophagidae). House flies (Musca domestica Linnaeus) and stable flies (Stomoxys calcitrans Linnaeus) prefer decaying food with a high vegetable content, including manure and lawn clippings, while the others, generally termed blow flies and flesh flies, prefer decaying meat. The life cycle of these flies is generally around three weeks, and control measures obviously consist of not allowing food to lie about for that time. For adult flies in the house, the best control are screens on doors and windows, in open doorways a curtain of plastic ribbons, and a handy fly swatter.

The bushfly (Musca vetustissima Walker) strongly resembles a house fly but is smaller and has only two stripes on its thorax instead of four. It will not enter houses and rarely breeds in built-up areas. The lesser house fly, Fannia canicularis (Linnaeus), is a small fly that will crawl on people's faces in the manner of bushflies.

The large brownish fly that frequently enters houses in Adelaide is a species of Calliphora, a blowfly.

#### Water

Standing water in tanks, gutters, ponds, and small containers is inhabited by mosquito larvae of which Aedes notoscriptus (Skuse) and Culex molestus Forskal are the most frequent in South Australia, particularly in water tanks and septic tanks. The world-wide Culex fatigans Wiedemann is common as larvae in open standing water, especially when it is foul.

Although they do not usually breed around houses, certain common brackish-water mosquitoes are particularly vicious biters as adults, both in and out of houses, especially in coastal areas. These are Aedes camptorhynchus Thomson, Anopheles vigilax (Skuse) and A. annulipes Walker.

Houses near sewage treatment works and other areas of extensive standing water are often subject to invasion by swarms of mosquito-like midges (Chironomidae), much to the alarm of the inhabitants. In fact these insects are quite harmless (a close look will show that they have no proboscis). Their larvae are bright red (and hence are called bloodworms) and breed in the bottom muck of standing waters, the red colour being due to haemoglobin which they use to absorb oxygen from these habitats. They are quite frequently seen in the water being drawn from rainwater tanks when these are getting low.

Many insects other than those mentioned will enter houses from time to time. Nearly all of them are attracted to light, and need cause no alarm. Screening of windows and the use of yellow globes for porch lights will reduce the problem.

Although not insects, the house centipede (Scutigerella sp.) and various spiders may be mentioned here. They are predators on insects and, in spite of their frightening appearance will not harm people unless they are handled.

## Insects of the Yard and Garden

Fish ponds and swimming pools often accumulate a thin floating scum of insects on humid nights or when located under a strong light. Some insects which are inhabitants of ponds and lakes often take up residence in swimming and decorative pools. As they migrate in darkness they usually arrive during the night and then several nights later quickly leave.

They include waterbugs of the families Notonectidae (back swimmers), Corixidae (water boatmen), Belostomatidae (giant waterbugs) and Nepidae (water scorpions); all have the short sucking beak characteristic of bugs. first two families contain moderately sized insects which are rather thin and whitish (back swimmers) or broader and darker (water boatmen). Belostomatidae include some moderately sized oval and brown bugs but also the massive Lethocerus distinctifemur Mencke which is usually over 50 mm long and can reach almost 70 mm. The nepids are quite a lot smaller than Lethocerus but are still large insects with a long thin 'tail' which is actually a breathing tube like a diver's snorkel tube. They have gained the nickname 'toe-biters' but, although they could sting by testing man for edibility with their sucking beak, they rarely do. Members of several families of water beetles may also come; beetles may be distinguished from bugs by their chewing mouthparts. Involved may be some Dytiscidae whose commonest species (Eretes australis Erichson) is medium sized and brown with a black head (though the much larger (25 mm long) Cybister tripunctatus Oliv. which is black with yellowish-brown margins is occasionally seen), the Gyrinidae which are smaller and more intensely black or even bluish species and the Hydrophilidae which have some medium sized black species and also include species of Hydrophilus which also are about 25 mm long but entirely shining black.

Native trees and shrubs are mostly hosts to native insects, few of which become pests on these trees in the home garden situation. Two lyre-shaped grey or brown pentatomid bugs, *Poecilometis strigatus* (Westwood) and *Poecilometis fuscescens* (Stål), visit a variety of native garden plants including silky oak (*Grevillea robusta*) and may sit on introduced fruit trees, hibiscus etc., but have not been implicated with any sort of damage here. Species of *Pittosporum* are frequently attacked by another pentatomid bug, *Pseudapines geminata* Van Duzee, which is restricted to this genus of plants. Native wattles

such as golden wattle, when it is attempted to grow them outside of their natural zone, can become badly infested with native species of psyllid bugs and also with sundry small Hymenoptera (wasps) which cause rounded galls near the ends of the branches, some of which can become as large as golf balls.

Like the wattles (Acacia spp.), the gum trees and mallees (Eucalyptus spp.) are a widespread group of native Australian trees which have a large number of associated insects, some of which follow them into gardens. On small or young eucalypts may be seen from time to time an intertwined mass of black rather shiny caterpillars, each caterpillar having a sparse covering of short, white hairs. These are in fact not the larvae of a moth or butterfly but of a sawfly (Perga affinis Kirby), which, in turn, is not a fly but a wasp distantly related to the Sirex wasp. The female wasp lays her eggs parallel to the midrib of the gum leaf in a blister-like patch. The larvae should not be approached too closely as they can 'spit' a corrosive acid which can damage sight if any should hit an eye. The pupal cases are formed in the earth at the base of the tree. Galls frequently occur also on eucalypt leaves and twigs; many are made primarily by wasps or flies into which parasites and hyperparasites have gained entry. The most bizarre galls are made by members of the coccid genus Apiomorpha, these are usually large and sometimes have horn like processes.

Gums and mallees of those species which have a whitish trunk from which the bark can be easily peeled e.g. red gum, are host to pentatomid bugs of one of a number of species of *Poecilometis* and chrysomelid beetles of one of the very many species of *Paropsis*. Members of both of these groups probably feed on the foliage at night but they usually are found taking refuge under the bark during the day. Their feeding is usually at such a low level that defoliation is rarely a problem.

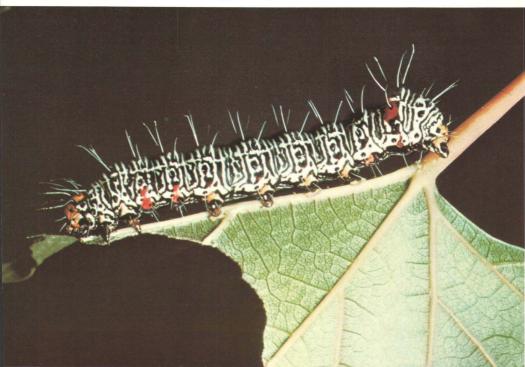
Among this whole suite of insects which feed on eucalypt (or attached mistletoe) leaves three moths are the subjects of frequent queries. On the leaves of the eucalypts large dark grey and brown larvae with thin transverse black bars, or large white or green silky pupal cases indicate the presence of the snout moth Entometa fervens Walker (Lasiocampidae). The adult moth sometimes comes to lights. It is a pale brownish-yellow with an orange hind wing, some wavy brown bands on the forewings and a prominent snout in front of the antennae. Small cases of twigs or leaves tied together with silk indicate the presence of case moths (Psychidae), some species of which, e.g. Clania ignobilis (Walker), feed only on eucalyptus whereas others, e.g. Hyalarcta huebneri (Westwood), feed on other genera of trees, both native and exotic. The larval hairs of the mistletoe browntail moth, Euproctis edwardsi (Newman), a lymantriid or tussock moth which feeds on the mistletoe on gum trees, are frequently blown around by the wind. They can cause an intense irritation if they contact the skin which can happen by their being blown directly on to a person or on to washing. Many cases of this rash have been seen on inhabitants of the eastern foothills suburbs of Adelaide and presumably it is also a problem in the Adelaide Hills and some of the wetter country districts.

Before proceeding to pests of introduced trees and shrubs it would be well to mention that many of the insects which you see resting on them may not be feeding on them. In some cases the insect is just resting while passing through, in other cases it will be a beneficial insect waiting for its prey. Many of the insects which you will see in your garden are beneficial and the great majority of the rest do not aggregate in sufficient numbers to be any sort of a pest.



Ichneumon wasp Echthromorpha intricatoria (Fabricius)

Grape-vine moth caterpillar Phalaenoides glycine Lewin





Stable fly Stomoxys calcitrans (L.)



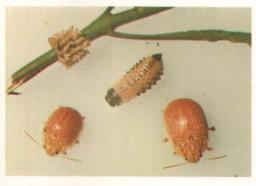
Thrips



Silverfish Ctenolepisma longicaudata Escholtz



J. A. Herridge Brown cricket Modicogryllus lepidus (Walker)



J. A. Herridge Chrysomelid or tortoise beetle Paropsis sp.



Crab louse Phthirus pubis (L.)



Wanderer butterfly caterpillar Danaus plexippus (L.) being approached by predatory shield bug Cermatulus nasalis (Westwood)



Glatygni's tiger moth larva or woolly bear *Spilosoma glatygni* Le Guillou



Small citrus butterfly caterpillar *Papilio anactus* Macleay



Mosquito Aedes notoscriptus (Skuse)



Pear and cherry slug Caliroa cerasi (L.)



House fly Musca domestica L.



House centipede Scutigerella sp.



Spider beetle Mezium affine Boieldie



White fly



saw fly larvae or 'spit fires' Perga dorsalis Leach



Drone fly Eristalis tenax (L.)



Black citrus aphid Toxoptera sp.



Mistletoe brown-tail moth caterpillar Euproctis edwardsi (Newman)



Rutherglen bug Nysius vinitor Bergroth



Psyllid with its lerp covering on red gum Glycaspis sp.



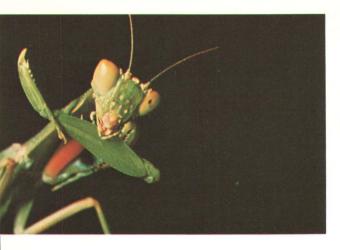
Cat flea Ctenocephalides felis (Bouché)



Crusader or St Andrews Cross bug Mictis profana Fabricius



Book-louse



Mantis Orthodera ministralis Fabricius



Ladybird beetle Leis conformis Boisduval



Hoverflies *Xanthogramma grandicornis* Macquart



Green-head ant Rhytidoponera metallica (F. Smith)



Flesh flies Sarcophaga sp.



American cockroach Periplaneta americana L.

All illustrations by Dr R. V. Southcott except two credited to J. A. Herridge

Significant members of the predacious, and therefore useful, insect component are icheumonid wasps. Echthromorpha intricatoria Fabricius and Lissopimpla semipunctata Kirby are day-flying while the night-flying species belong to the predominantly brown genera Enicospilus and Netelia. These mostly parasitise caterpillars though some beetle larvae are also parasitised. Some species of the wasp family Tiphiidae which have winged males and wingless females also frequent gardens. The members of this family mostly parasitise the larvae of scarab beetles, but the large 'blue ant' (Diamma bicolor Westwood) attacks mole crickets. As the adults forage over quite long distances the commonest species in the garden will vary accordingly to the district in which it is located. Minute wasps of the chalcidoid and proctotrupoid complexes are quite common in gardens, most are parasitic on the eggs or young stages of other insects though a few form galls on garden trees or shrubs.

Other fairly specific predators you may see are the two hover flies (Syrphidae), Xanthogramma grandicornis Macquart and Syrphus viridiceps Macquart, the last of which, at least, is an important predator of aphids, and lady-bird beetles (Coccinellidae) which tend rather to attack coccids. Our commonest lady-bird species are the black spotted but mainly yellow Leis conformis (Boisduval) and the red and black Coccinella transversalis Fabricius. The larvae of lace wings (Neuroptera) are also useful predators.

Another hover fly which is abundant in gardens is *Eristalis tenax* Linn. The adult resembles very closely a honey bee except, like all flies, it has only a single pair of wings. The larva is a rather disgusting object which is slimy with an elongate tail and is found in soapy or fatty drains and septic tank outlets; it is commonly called the rat-tailed maggot though it is considerably larger than the maggots of other flies. The honey bee itself is present in most gardens in small numbers but can become numerous enough to cause concern either on *Lippia* lawns, or if they establish a colony in a houshold ventilator, a shed or crotch of a tree.

More general predators include preying mantids of which the three most common species would be the broadish green Orthodera ministralis (Fabricius), the larger more elongate Archimantis latistyla (Serville) which has a prominent pale stripe along its abdomen and the quite small wingless Paraoxypilus tasmaniensis Saussure, the latter brown with a laterally expanded abdomen and more common in the weeds layer. Spiders and birds also are most useful general predators in the garden.

On introduced trees, shrubs, annuals and vegetables occur a number of pest species. Many of these, like their hosts, are of exotic origin. In this grouping are quite a few aphids, especially the woolly aphid Eriosoma lanigerum (Hausmann), the black citrus aphids Toxoptera aurantii (Boyer de Fonscolombe) and T. citricidus (Kirkaldy), the black and the green peach aphids, Brachycaudus persicae (Passerini) and Myzus persicae (Sulzer), the rose aphid Macrosiphum rosae (Linn.), and the cabbage aphid Brevicoryne brassicae (Linn.). Several introduced scale insects (Coccidae) are important garden pests with the red scale of citrus, Aonidiella aurantii (Maskel), and San José scale, Quadraspidiotus perniciosus (Comstock), about the most important. Citrus are attacked heavily by quite a number of insects and apart from aphid and red scale are attacked very frequently by the citrus white fly, Orchamoplatus citri (Takahashi). The latter belong to the hemipterous family Aleyrodidae and look like little white

motes flying around the orange or lemon. Other species attack tomatoes and curcubits or are pests in greenhouses. The curculio beetle, *Otiorhynchus cribricollis* Gyllenhall, is another important pest of roses and small bushes. Its presence is often unsuspected as it leaves its concealment in the soil to feed only at night, however the presence of rather rectangular excisions in the leaves of any shrubs is a good clue to its presence.

The green vegetable bug Nezara viridula (Linn.) was an important pest of garden vegetables, especially of tomatoes and beans. However the liberation of a wasp from Egypt which is parasitic on its eggs has caused the numbers of this insect to drop dramatically. The larva of the sawfly Caliroa cerasi (Linn.) so resembles a small slug that few people realise that it is the young stage of an insect, the larva is usually called the pear and cherry slug but it can be seen on other stone and pome fruits also. Vines are sometimes host to the large larva of the grape-vine hawk moth Hippotion celerio (Linn.) which is green or brown with some prominent yellowish markings like eye spots and a false spine near the tail end. The adult hawk moth has a strongly tapering body with the ends of the wings also tapering strongly, the forewing is greyish with various lighter markings and part of the hind wings are pinkish. The larvae of a related hawk moth, Herse convolvuli (Linn.), the convolvulus hawk moth, occasionally are seen eating morning glory and other plants of the convolvulus family.

Quite a number of native insects have adapted to feeding on introduced trees, shrubs, etc. As a result some of them are now much more abundant than when they lived only in the wild. A close relative of Hippotion celerio is Hippotion scrofa (L.) which fed also on convolvulaceous plants but has now adapted (in South Australia at least) to Coprosma, the adult moth is much browner than the grape-vine hawk. The faintly red spotted but mainly greenish caterpillars of a native moth, Phalaenoides glycine Lewin, are the most serious defoliators of vines, much more serious than the grape-vine hawk moth and this species is now just simply called the (grape) vine moth. The adult moth is mostly black but with some broad yellow band-like markings. In many cases vine moth larvae will be seen to be attacked by the predatory shield bug Oechalia schellenbergii (Guérin-Méneville) which are brown with a strong spine on each side laterally. Wanderer butterfly larvae (Danaus plexippus L.) are attacked by a related bug, Cermatulus nasalis Westwood. The plague thrips, Thrips imaginis Bagnall, which likes especially roses, appears to be an endemic insect as certainly is the cottony cushion scale, Icerya purchasi Maskell. It now favours citrus and appears thereon as white fluted cottony structures just under 1 cm in length. The species originally fed on wattles as did the Crusader or St Andrews cross bug, Mictis profana (Fabricius), which now also feeds occasionally on citrus leaves but whose main preference is clearly Cassia floribunda. Citrus has also become a host to the black and white checkered small citrus butterfly, Papilio anactus Macleay. Scale and aphid infestations, on citrus particularly, but on other plants as well, are materially assisted in spreading by small black native ants which have been provisionally indentified as Iridomyrmex fornicatus Emery, though there may be other Iridomyrmex species involved as well, which leads the young stages of the pests around to better the yield of the excess sugar secretions that they excrete and which the ants harvest—a kind of herdsman relationship if you like.

There are two other native moths which are frequently seen by the householder. First the little 'painted apple moth', Orgyia anartoides (Walker), which sometimes feeds on zonate pelargoniums (mistakenly called geraniums by most householders) and which pupates in an untidy hairy bag in the corners of verandahs, roofs and sheds. And secondly Spilosoma glatygni Le Guillou whose larvae, marked with two black and a brown band of dense hairs, are called woolly bears in this State. Woolly bears are abundant in spring on all sorts of plants from boxthorn through sour sobs to zonate pelargoniums and roses.

In the drier zones north of Orroroo ornamental trees including athol pine may show an unexplained die-back. This can be due to the larvae of a large native bostrychid beetle, Bostrychopsis jesuita (Fabricius), the auger or jesuit beetle, which bores into the sapwood. A quite harmless native beetle is the elephant beetle, Orthorhinus cylindrirostris (Fabr.), a weevil with a long tubular snout seen often on stone fruit trees but rarely as more than single individuals.

In the layers of grass and weeds there are some native and some introduced species significant enough to rate a mention. Among the natives the small Paraoxypilus mantid has already been mentioned. Natives also are Ruthergien bugs, Nysius vinitor Bergroth, which are small and grey and the long headed grasshopper, Acrida conica (Fabricius), which is green or brown according to the season and the prevailing colour of the grass. In this layer also occur two introduced weevils both now regarded as pests, the Sitona weevil (Sitona humeralis Stephens) and Graphognathus leucoloma (Boheman), the white fringed weevil.

In the mown grass of lawns there is a native suite of small hemiptera which are not of any special note but two species of beetle are. One, *Aphodius tasmaniae* Hope or pasture cockchafer, is native and a pest far beyond the home lawn whereas the second, the African black beetle *Heteronychus arator* (Fabricius), sticks to lawns in South Australia. The grubs of one or other of these species together with larvae of pasture moths leave many small bare patches in lawns.

On bare and hard patches small black and white bugs of the genus Oxycarenus sometimes appear. More common on the barer, but not necessarily hard, ground are earwigs which do only a little damage to some beet crops or strawberries. The most common earwig is Labidura riparia Kirby which is now almost cosmopolitan.

In cracking soils will almost certainly occur either the well-named black field cricket, Teleogryllus commodus (Walker), or in drier districts several native species of much browner crickets. These may be seen moving during the day if you cast a shadow into their crack, but they emerge and do their damage at night. Mole crickets are burrowing crickets of another family (Gryllotalpidae) which actually live right in the soil and can often be heard singing after rain. Like the cutworm larvae of the pasture moths and the grubs of pasture beetles mole crickets damage mostly the roots of plants.

While walking in the garden around March in the wetter districts, as well as experiencing mosquito attacks, one can receive the unpleasant attention of March flies; in South Australia most will belong to one or other species of the genus Dasybasis. In the forested areas of the Adelaide Hills and the South East the inch ant (Myrmecia pyriformis Fabricius) sometimes crawls up into shrubs

and young trees and will give a savage sting if shaken on to you. Smaller stinging ants belonging to the genus *Rhytidoponera* are common in the city and suburbs. Honey bees account for the greatest proportion of the stings received around the garden; the various hunting wasps which you may see searching over bare ground for signs of caterpillars or spiders with which to stock their nests very rarely sting and then only if really provoked.

It is not wise to spray or dust garden plants more than is absolutely necessary as, by so doing, many useful insects are destroyed, thereby perhaps letting some other pest increase. Leaf chewing insects can be reduced in numbers by spraying the leaves with a variety of sprays from lead arsenate combinations to chlordane or lindane. Many sucking insects such as thrips or aphids can be controlled by these formulations but heavily armoured suckers such as the scale insects (Coccidae), most Heteropterous bugs, stem borers and root feeders are not so easy to manage. If trees are affected by any of the latter then a systemic insecticide such as Metasystox will give the best results. However, systemic insecticides are extremely toxic and need extreme care in handling. Root feeding beetles in lawns and swards are best controlled by one of the proprietary mixtures of lawn manure with lindane (which also may kill earthworms).

When using insecticides in the garden, always read the label before buying, take all the safety precautions recommended and do not use if the fruit or vegetable is going to be harvested before the period when it is safe to do so according to the label.

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PART 2

# **EXPLORATION AND COLONISATION**

## EXPLORATION BEFORE COLONISATION

The Dutch made the first recorded discovery of Australia in 1606 on the Gulf of Carpentaria, and Dutch ships were sighting Western Australia from 1616 onwards. It was in 1627 that the first part of the South Australian coast was discovered when the Gulden Zeepaard under the command of Francois Thyssen examined the coastline from Cape Leeuwin to the islands of St Francis and St Peter in the far west of South Australia. On board the Gulden Zeepaard was Pieter Nuyts, 'Councillor Extraordinary of India', after whom this area was named 'A Landt Van P. Nuyts'.

As the South Australian coast presented no evidence of prospects for trade, the Dutch, being essentially a trading nation, were not inclined to closer investigation. Indeed, so little interest was displayed in this section of the Australian coastline that it was 165 years before the next recorded sighting of South Australia was made, and this was by a French explorer.

Rear-Admiral D'Entrecasteaux, who had been searching all around Australia for the lost French explorer La Perouse, sighted land south of Cape Leeuwin in December 1792 and examined the cliffs of the Australian Bight. He sailed to the head of the Bight, but then after so many miles of barren coast abandoned hope of finding anything other than desolate country, and sailed south for Van Diemen's Land. The early impressions of the South Australian coast were therefore most unfavourable and tended to discourage further investigation.

The British who followed were far more interested in the possibility of colonisation to help ease their population problem at home, and consequently, once the effects of early discouragement had worn off, they began to take an interest in South Australia as a possible site for a new colony. Lieutenant James Grant was the first British explorer to sail along the South Australian coast, sighting the extreme easterly shores of South Australia about 1800. While in Cape Town he had been informed of the discovery of Bass Strait and was instructed to sail through it in the Lady Nelson on his way to Port Jackson. Sailing along the extreme south-east coast he named Cape Banks, Cape Northumberland, Mount Schank and Mount Gambier.

The first notable British contribution to the exploration of the South Australian coast came, however, with the voyages of Matthew Flinders in the Investigator. With the support of the President of the Royal Society, Sir Joseph Banks, Flinders sailed from England on 18 July 1801. On his voyage of circumnavigation of the Australian continent he thoroughly explored the coast of South Australia between January and April 1802. In addition he discovered the Gulfs and Central Highlands, thus solving the question of whether a north-south strait divided the Australian continent in two. More important was the fact that Flinders reported very promising country for settlement. Many places along the coast carry the names given by Flinders; several of these were named after places in his home county of Lincolnshire, e.g. Port Lincoln, Sleaford, the Althorpes and Boston Bay, while others include unusual names such as Backstairs Passage, The Pages, and Antechamber Bay. Flinders was in fact the first man to explore South Australian waters between Nuyts Archipelago and Encounter Bay. It was at Encounter Bay on 8 April 1802 that he met Captain Nicolas Baudin, the French explorer, heading along the coast from the east in Le Geographe.

Baudin, in command of Le Geographe and accompanied by Le Naturaliste, left Le Havre in October 1800 with instructions to explore several specified regions including the then unknown portion of the southern coastline of Australia. After being delayed in the East Indies and Van Diemen's Land, Baudin sailed westward and charted the mainland coast from Western Port to Encounter Bay, where he met Flinders. The object of Baudin's expedition was to make scientific discoveries on behalf of Napoleon, but he had wasted considerable time en route. most of the South Australian mainland coast was discovered before him by Grant and Flinders, and he was the original explorer of only a small section between Cape Banks and Encounter Bay. Some French names still remain, for example Lacepede Bay, Guichen Bay and Rivoli Bay. After the meeting at Encounter Bay, Baudin sailed further westward and along the northern shore of Kangaroo Island to Murat Bay, before being forced to abandon further exploration and to return to Port Jackson in June 1802. However, after re-equipping his expedition and with the addition of another ship (Casuarina) for charting work in shallow waters, Baudin returned to the South Australian coast by way of King Island in Bass Strait. Leaving King Island on 27 December Baudin in Le Geographe and Freycinet in command of Casuarina headed direct for Kangaroo Island where they circumnavigated the whole island and charted its coast, being the first to chart its southern and western shores. This was to be the last major contribution made by an official French expedition to exploration of the South Australian coast,

Although these discoveries on the South Australian coast did not lead to any immediate colonisation, there began an increasing series of visits by sealing vessels

to Kangaroo Island. A group of American sealers built a schooner on the island in 1804, while wild gangs of sealers and runaway convicts were forming settlements from 1806 onwards. In addition, French exploration in the area had led to a fear on the part of the British authorities that it might result in French colonisation, and, although not greatly valuing the area for itself, the British would have found it an embarrassment to have the French settled on the Australian continent. As a result, in 1804, the British sent Grimes, a government surveyor, to Kangaroo Island to report on it as a possible site for colonisation. The Grimes Report was most unfavourable, stating that the soil was poor and that the island lacked fresh water. On the other hand, in 1819 a Captain Sutherland visited the island and wrote an over-optimistic report on its future. It was this report which later led the South Australian Company into establishing their first station there in 1836.

In the period between 1804 and 1836 a number of further discoveries took place at various parts of the South Australian coastline by Captains Dillon (1815-16), Goold (1827-28), Hart (1831-33), and Jones (1833-34), together with the discovery of Lake Alexandrina by a group of sealers in 1828. Reports of this period were marked by contradictions regarding the suitability of South Australia for settlement. However, contradictory as were these accounts reaching England, they managed to convince the founders of South Australia even before 1830 that the available fertile land was more than adequate for the founding of a colony.

The most significant explorations of the period immediately before colonisation were those of Captain Charles Sturt, who explored the Murray River from New South Wales down to its mouth; traversed Lake Alexandrina and located the Goolwa channel, reaching the western shore of the Murray mouth on 12 February 1830. Captain Sturt's journey has become something of an epic in Australian history; with a small party of soldiers and convicts he rowed 2 700 kilometres on the Rivers Murrumbidgee, Darling and Murray. They suffered from desperate weariness, endured a distressing lack of provisions, and were periodically attacked by Aborigines. However, the main object of Sturt's journey was accomplished; the settling of the long insoluble 'problem of the rivers' of south-eastern Australia. But the real significance to South Australia was more than the mere settling of what was little more than an academic question, for his discoveries opened up 3 200 kilometres of navigable inland waterway and gave to Gulf St Vincent, which lay so near the mouth of the Murray, a new significance. It was the age of canal building in Europe and of the development of the Mississippi in America, so that navigable water was considered of prime importance. The exuberance felt by everyone interested in South Australia at such a discovery is typified by the Wakefield theorists who believed that the entire produce of eastern Australia would eventually be shipped from In fact the Murray became the grand attraction of the scheme. However, Sturt's own fervour at this stage was somewhat cooler than that of interested persons in England for there was one great disappointment which marred his discovery—the Murray lacked a sufficiently safe navigable Sturt found that the Murray flowed into a series of shallow mouth. So little did Sturt's contemporaries underlakes and a sand-blocked mouth. stand the earth movements and land formation of the area, that their only

conclusion was that there must somewhere be another channel emptying the waters of the Murray into the sea. So, the 'problem of the rivers' was replaced by the 'mystery of the Murray mouth'—and official action was to be taken promptly to solve this mystery.

Governor Darling of New South Wales sent Captain Collet Barker to the southern coast to try to solve the problem of the Murray. Barker, landing at Noarlunga on 17 April 1831 ascended Mount Lofty and then returned to his ship, the Isabella, and examined Port Adelaide. After landing again at Rapid Bay, he crossed the hills to the Murray, thus proving that the river had no westerly outlet. Barker's expedition came to a tragic end when, under mysterious circumstances, he was apparently murdered at the Murray mouth by the usually peaceable Narrinyeri natives. This was the first of a long series of tragic deaths, mainly arising out of navigational difficulties, in the area of the Murray mouth which tended to discourage navigation later. Barker's party, however, reported fertile country in the region and the existence of a pass from the Murray mouth to Rapid Bay on Gulf St Vincent. While Barker's expedition proved without doubt that there was no really navigable connection between the Murray and the sea, it added to the rapidly growing volume of favourable accounts of the fertility of the region around Gulf St Vincent. Interested people in England were so obsessed with the geographical fact of the great Murray waterway opening up the centre of Australia that they barely registered the unfavourable accounts of its egress to the sea.

Probably the greatest encouragement for the settlement of South Australia came from Charles Sturt himself who, after his return to Sydney in May 1830, wrote Two Expeditions into the Interior of Southern Australia (published in 1833), in which he said: 'My eye never fell on a country of more promising aspect, or more favourable position, than that which occupies the country between the lake and the ranges of St Vincent's Gulf, and continuing northward from Mount Barker, stretches away without visible boundary'. This glowing report, together with that of Barker's expedition, was welcomed by those in England seeking a suitable site to establish a colony where the principles of the Wakefield Plan could be applied without restriction. Sturt spared no efforts in converting opinion to the potentialities of South Australia and, as well as his Two Expeditions, he wrote a private letter to the Colonial Office on 17 February 1834. actually marked the present position of the Outer Harbor at Port Adelaide as the proper and natural site for the capital. 'It is in the angle formed by the creek with the coastline that I would recommend the formation of a township, . . . because it appears to me that when the distant interior shall be occupied and communication established with the lake and valley of the Murray, the banks of this creek will be the proper and natural site for the capital . . . country to the north would be overspread, the valley of the Murray would be peopled, every available spot would be located, and its numerous ramifications would afford pasture for thousands of cattle'. In his reasons for this opinion he showed more foresight than he was to do later when, in disagreement with Colonel Light, he supported those who wished to move the capital to Encounter Bay.

Colonel William Light, who had been appointed Surveyor-General of the new colony, sailed from England in the Rapid on 4 May 1836 with instructions

to select a site for the capital of the colony. After a brief visit to Encounter Bay, which he found unsuitable, he landed at Nepean Bay on Kangaroo Island where some South Australian Company ships had already established a settlement. From here Light explored the east coast of Gulf St Vincent. Then, pressed for time by the unexpected arrival of the new settlers, he was able to make only a quick trip to Port Lincoln and a brief inspection of part of the west coast of Gulf St Vincent before, in concurrence with Sturt's earlier opinion, he decided that the most suitable site for Adelaide was on the banks of the small, but centrally situated, River Torrens.

## COLONISATION

The colonisation of South Australia was in itself an experiment involving certain new principles and was to represent a turning point in British colonial policy. The period was conducive to colonisation as in Britain there was wide-spread unemployment and poverty, the popular remedy for which was emigration. Nevertheless the somewhat revolutionary nature of the plans was to result in seven years of negotiation and considerable modification of early ideas before the colonisation of South Australia was finally approved.

The theoretician was Edward Gibbon Wakefield, whose ideas were contained in a number of writings including the now famous A Letter from Sydney series, written in 1829 while he was imprisoned in Newgate Gaol. Wakefield's plans involved three broad principles: the sale of land; the use of the receipts for sponsoring emigrants; and the granting of some measure of self-government. Drawing on developments in New South Wales Wakefield argued that the then current system of giving away vast tracts of land to settlers resulted in an imbalance between land and labour. It was therefore desirable to restrict land distribution and increase the labour supply, and this could be done by selling land at a suitably high price to prevent all labourers becoming landowners and by devoting the proceeds to free passage for a carefully selected labour force.

At the same time, following conflicting observations by early explorers, encouraging reports of the South Australian coastline filtering in from traders and seamen gave rise to moves for the practical application of Wakefield's ideas for the founding of a colony in South Australia.

The first attempt to form a colony was made by Robert Gouger who, having met Wakefield in Newgate Gaol in 1829, was so impressed with his ideas as to approach certain interested parties with a view to purchasing a tract of land in South Australia. He was unable, however, to gain sufficient support to interest the Colonial Office in his plans. In 1830 the National Colonization Society was formed with Gouger as its secretary. The Society served to further disseminate Wakefield's principles, but was not directly associated with plans for a colony in South Australia.

Renewed interest in colonisation followed the first of Captain Sturt's enthusiastic reports of the land of the lower Murray and in 1831 a group of intending settlers, still enthused with the ideas of Wakefield, formed the South Australian Land Company. A committee headed by Colonel Robert Torrens approached the

British Government for a charter and then made preparation for the first voyage. The Government was not prepared to grant the necessary territory, and negotiation continued until 1833 when the Company finally conceded that the Government was unlikely to approve any plans involving a chartered colony.

From the same core of enthusiasts who had supported this and earlier ventures there emerged in 1834 the South Australian Association. This group was prepared to abandon hopes for a chartered colony, conceding the issue of self-government, provided that the enabling legislation accommodated Wakefield's other principles for land sales and migration. The passage of the legislation was by no means smooth; the scheme was new and involved untried principles, and knowledge of the territory was still extremely limited. Doubts on the suitability of the site were to be largely dispelled by the writings and personal representations of Sturt and the confirmatory expedition by Barker, and finally in July 1834 legislation for a colony in South Australia was put before Parliament. This legislation represented a considerable compromise on earlier plans.

The South Australian Colonization Act (4 & 5 William IV. Cap. 95) was assented to on 15 August 1834; the persistent efforts of Gouger, Torrens, and many others for a settlement in South Australia had finally borne fruit, and at least some of the ideas of Wakefield were to be tried. The territory allotted under the Act embraced 802 508 square kilometres, with the western boundary the 132nd meridian of east longitude and the other boundaries virtually as they are today. The colony was to be opened to settlement by British subjects, but under no condition were convicts to be admitted, making South Australia the only State to be settled entirely by free persons. Authority was to be divided, with the Colonial Office through the Governor controlling all affairs of government except land sales and immigration, these fields being reserved to a Board of Com-Provision was made for self-government upon the population reaching 50 000. All land alienated by the Crown was to be sold at a price of not less than '12 shillings' (\$1.20) per acre and the whole of the proceeds used in 'conducting the emigration of poor persons from Great Britain and Ireland'.

Although Parliament was prepared to authorise the experiment it was not prepared to finance it; the colony was to be self-supporting. The Commissioners were accordingly authorised to borrow \$400 000 against future general revenue to finance the founding of the colony and the establishment of government, and \$100 000 against the sale of land to start the migration program. Finally, the Act contained two conditional clauses which were to harass the whole venture and served to delay colonisation another twelve months. The first of these conditions, which were to be satisfied before the Commissioners could exercise their general powers, required that government securities to the value of \$40 000 be lodged as a guarantee for the venture. Secondly land to the value of \$70 000 was to be sold before settlement.

A Board of Commissioners with Torrens as chairman was appointed early in 1835. The Board immediately offered land in the new colony at \$2 an acre including rights to a city acre with every 80 acres of rural land. In spite of considerable publicity, unsurveyed land in an unknown colony proved difficult to sell, and with less than half the land sold the price was reduced to the permitted

minimum of \$1.20 an acre. Finally, George Fife Angas, a member of the Board, together with two others took up the balance of the land on behalf of the South Australian Company, which was then in the process of being formed.

In December 1835 with sufficient land sold and with the \$40 000 guarantee lodged with the Treasury, the Commissioners were free to begin the business of colonisation. The South Australian Company was formed in January 1836, and in February two ships of the Company, the John Pirie and the Duke of York, sailed for Kangaroo Island to establish a settlement. Another Company ship the Lady Mary Pelham followed later.

The Cygnet carrying the Deputy Surveyor, G. S. Kingston and his staff left at the end of March and the Rapid with Colonel William Light, Surveyor-General on board departed at the beginning of May. One of Light's most important tasks was to choose a site for the first settlement and details of his early movements are given on pages 46-7. The first Company vessels reached Kangaroo Island in July, and colonists arrived at Adelaide from early November. The first Governor of the colony, Captain John Hindmarsh RN, arrived at Holdfast Bay on 28 December 1836 and the new colony was officially proclaimed on the same day. By this time some 300 colonists were already in residence. Hindmarsh was to remain in the colony for eighteen months, a period marked by political feuding and very little progress.

The one outstanding feature of the first two years was the work of Light. Expected to carry out difficult tasks with an inadequate staff Light first had to contend with opposition to his choice of a site for Adelaide. His views prevailed and the city was surveyed to his plan and the land was allotted by March 1837. There were 700 one-acre lots in Adelaide south of the River Torrens and 342 one-acre lots in North Adelaide. Victoria Square was situated in the centre of the City and there were four other squares in Adelaide as well as one in North Adelaide. An important feature in Light's plan was the extensive parklands surrounding the City.

The survey of country land for the preliminary purchasers proceeded very slowly and it was not until May 1838 that the first ballot for country sections was held. At the same time the survey staff were becoming increasingly disgruntled with the unrealistic demands of the Commissioners and in June almost the entire staff resigned. Light died in October 1839.

While the preliminary survey was in progress the settlers remained in Adelaide where their energies and resources were largely devoted to speculation in town lands and in land orders, and where supplies had to be imported with a corresponding outflow of capital. Superimposed on this situation was the continual arrival of new immigrants who served only to increase the volume of the unemployed.

Much of the inactivity of the colony was brought about by constant clashes between Hindmarsh and the Resident Commissioner J. H. Fisher, which finally led to the dismissal of Fisher and the recall of Hindmarsh in July 1838. It was realised that the divided authority as incorporated in the Colonization Act was impracticable, and the next Governor, Colonel George Gawler, was authorised to represent both the Crown and the Commissioners.

Appalled at the stagnation of the colony, Gawler immediately undertook a liberal spending program. Surveying was considerably increased with the result that 200 000 hectares had been surveyed by mid-1841. At the same time

an extensive public building and works program provided relief for the unemployed. Generally Gawler created a renewed state of optimism which remained until 1840 when land values were depreciated and sales declined. Immigrants continued to arrive throughout this period.

Most of Gawler's expenditure was met by bills drawn on the Commissioners in London. In 1841 a situation was reached where the Commissioners could no longer honour these bills and Gawler was summarily replaced by Captain George Grey. The Imperial Parliament met the bulk of the debts, and in 1842 the Board of Commissioners was abolished. Thus the small measure of independence which the Board represented disappeared and South Australia became an ordinary Crown Colony.

The term of office of Grey was in contrast to that of Gawler, with Grey imposing rigid economies. Public expenditure was cut and considerable unemployment with its accompanying hardships followed. Speculation ceased and the unemployed gradually left Adelaide to be absorbed on the lands which Gawler had opened up. By this time the flow of immigrants had ceased with the suspension of the assisted migration scheme.

By 1844 the colony was producing wheat in excess of its needs and when Major Robe succeeded Grey as Lieutenant-Governor in 1845, South Australia finally became self-supporting. Moreover prosperity was on the doorstep; copper had been located at Kapunda in 1843 and a major find was made at Burra in 1845. Heavy immigration followed these discoveries and continued until the Victorian gold rush. Copper soon became the principal export, with wool providing a complementary cargo. In addition, the repeal of the Imperial Corn Laws in 1846 and the Navigation Acts in 1849 strengthened the export trade in grain.

The discovery of gold in Victoria in 1851 had a two-fold influence on the development of South Australia. In the first place it drained off a large proportion of the skilled artisans and forced the closing of the copper mines. Secondly it gave great impetus to agriculture when the price of wheat rose sharply—the feeding of the miners became as attractive a proposition as was the actual mining. Four years later, when the miners returned, many of the more fortunate purchased land with their winnings.

At the same time political changes were taking place and in 1856 South Australia attained self-government.

#### EXPLORATION AFTER COLONISATION

Only a minor portion of the area proclaimed as South Australia was to prove economically viable, but extensive exploration with its accompanying hardships was necessary to establish this fact. Post-colonisation exploration was of two forms; the first being the continuous process of discovery as settlers sought grazing and crop lands and sometimes mineral resources, and the second the more deliberate activities of the professional explorers as they sought to cover vast distances through unknown terrain.

The earliest exploratory moves of the colonists were directed towards establishing an overland route between Adelaide and Encounter Bay, and in discovering a north-easterly passage to the River Murray that would by-pass

the Mount Lofty Ranges. Contact was first made with Encounter Bay in about July 1837 by Colonel Light and J. H. Fisher, and in December of the same year an expedition by Strangways and Hutchinson played a further important part in making contact with the River Murray by driving a bullock cart across the ranges to Encounter Bay, and then exploring the Murray mouth, the Goolwa channel and the southern part of Lake Alexandrina. The north-easterly route to the Murray was first traversed successfully early in 1838. Penetration of the Mount Lofty Ranges began in 1837, and by the end of the year parties had crossed the ranges and descended to Lake Alexandrina.

From the beginning of 1838, attempts were made to open up stock routes from the eastern States. Joseph Hawdon and Charles Bonney were the first to make an overland cattle drive to Adelaide. Leaving Hawdon's station near Albury on 13 January 1838 with a party of seven men, they took a route which followed the Murray for much of the way, and reached Adelaide in eleven weeks with the cattle in good condition and only four head out of 300 lost en route. At the same time, Edward John Eyre was making a similar cattle drive, but after unsuccessfully trying to find a suitable trail south of the Murray, he was forced to make his way back to the Loddon River and then follow the trail taken by Hawdon and Bonney. In another journey starting in 1838, Eyre became the first to bring sheep overland to Adelaide, driving 1 000 sheep and 600 cattle along the Hawdon trail. Charles Sturt was another to make an early stock drive to Adelaide, while Bonney in 1839 pioneered an alternative route which followed the south-east coast of the State and crossed the Murray above Lake Alexandrina.

Other parts of the State were also attracting attention. A section of Yorke Peninsula was visited in 1838, and in the following year a number of expeditions were made into the hinterland of Port Lincoln. Thus by 1840 the area within a 80 kilometre radius of Adelaide had been explored for pastoral, farming and mineral lands. Settlers had also ventured by boat along the Murray, by boat to Port Lincoln and thence inland, and by boat and overland to Yorke Peninsula. Reports by drovers who came down the Murray suggested that the land on the other side of the Murray was of little immediate value. It was soon to be realised, however, that very different conditions prevailed in the Lower South East, and by the mid-1840s this area was supporting a considerable sheep population.

Knowledge of the arid interior and of the far west coast was to be obtained from a number of major expeditions, the first such venture being led by Edward John Eyre. In 1839 Eyre journeyed north to Mount Arden, at the head of Spencer Gulf, where he established a base camp. From Mount Arden he made the first sighting of the dry bed of Lake Torrens. Crossing to Port Lincoln, Eyre proceeded up the west coast of the peninsula which came to bear his name, passed through Streaky Bay, and came to within 80 kilometres of the Western Australian border. The return journey to Mount Arden camp was made across the top of Eyre Peninsula.

The interest of the colonists was now divided between the country to the northward, including Eyre's new-found lake, and the possibility of establishing an overland stock route to Western Australia. Eyre having just returned from the desolate country of the Great Australian Bight showed little enthusiasm for the latter idea, and in June 1840 set out for the north. From Mount Arden he

made three attempts to penetrate beyond the lakes, but after following the Flinders Ranges to Mount Hopeless and making a number of observations, he concluded that Lake Torrens was a giant horseshoe-shaped salt lake forming an impassable barrier. This erroneous belief was to persist for eighteen years.

Thwarted in his efforts to go north, Eyre decided to attempt the western crossing. Leaving Mount Arden the party separated, one group going direct to Streaky Bay while Eyre went down to Port Lincoln. The party reformed at Streaky Bay and moved to Fowlers Bay, where a camp was established in November 1840. After a number of preliminary explorations around the Bight, Eyre and a small party set out for King George Sound (Albany) in February 1841, having sent the remainder of the party back to Adelaide. Eyre arrived at King George Sound in July after an extremely tortuous crossing.

In 1842 and 1843 the Surveyor-General, Colonel Frome, made two trips to the Lake Torrens region in an attempt to determine the nature of the area. However, after reaching a 'desert-like' Lake Frome (which he believed to be part of Lake Torrens) he turned back, making two short thrusts to the east on the return journey. Frome had seen enough to be able to report that there was no country as far as the meridian 141° (and probably much beyond it) available for either agricultural or pastoral purposes.

Captain Charles Sturt, whose earlier journey down the Murray had helped precipitate the colonisation of South Australia, was again to contribute to South Australian exploration. Considerable mystique had developed concerning Central Australia, including the rumoured presence of an inland sea, and in August 1844 Sturt set out from Adelaide in an effort to unveil this area. Hoping to avoid the supposed horseshoe lake, Sturt followed the Murray and Darling Rivers to Menindee. After passing through Broken Hill and seeing Eyre's Mount Hopeless from the other side of the lakes, the party moved to Mount Poole some 300 kilometres north of Menindee. Here they rested for six months while waiting for In July 1845 Sturt set off in a north-westerly direction crossing Sturt's Stony Desert and the north-east corner of the State. Although temporary relief was provided by Eyre Creek, the course of which they followed for some considerable distance, the desert nature of the subsequent terrain forced the party to turn back when very close to their central goal, and only 800 kilometres from the Gulf of Carpentaria. A second assault on the desert also failed, although Sturt explored along Cooper Creek for almost 150 kilometres before returning to the base camp and thence to Adelaide in January 1846.

In 1846 John Horrocks led a small party north from his station, Penwortham, through the Flinders Ranges via Horrocks Pass (so named by the party) and on to a camp site at Depot Creek. The party had brought with them the only camel then in the colony, the first time one had been used for exploration work in Australia. From Depot Creek Horrocks made two trips, the first of about 30 kilometres and the second about 100 kilometres to Lake Dutton where, jostled by his camel, he accidentally shot himself, thus bringing the expedition to an early end, but not before he had formed the opinion that there was no suitable pastoral land in that direction. Horrocks died of his wounds about three weeks later.

Further to the west a small expedition led by John Darke explored country to the north and east of the Gawler Ranges, and concluded that there was no useful land for settlers in this region. On his way home to Port Lincoln Darke was mortally wounded by natives near what is now known as Darke Peak. In 1857 Stephen Hack explored the country west of Lake Gairdner and found useful pastoral country at the south-western end of the Gawler Ranges.

At about this time the northern lakes again became a centre of interest. In 1856 there had been considerable rainfall in the area, and when the Deputy Surveyor-General, G. W. Goyder, visited Lake Torrens he found an inland sea surrounded by excellent vegetation. Goyder's glowing report was, however, discounted by a return journey the following year. Indeed the extremely fickle seasons experienced in the north were to lead to many conflicting reports as the explorers and settlers moved northwards. Between 1857 and 1859 several exploratory expeditions visited the region of Lake Torrens and it was during this period that the myth of the horseshoe lake was destroyed. Knowledge of the lakes district was extended by B. H. Babbage, who discovered Lake Eyre in 1858, and Major P. E. Warburton, who located the first stock crossing. A. C. Gregory, coming south from Queensland in search of Leichhardt, passed between the lakes en route to Adelaide in 1858.

At the same time parties were searching for pastoral country in the north, with the most extensive search being made by John McDouall Stuart in 1858. Stuart, who had been in Sturt's party in 1844, set out from Mount Arden, passed to the west of Lake Torrens, and circled north of Coober Pedy, returning to Mount Arden via Fowlers Bay. In the meantime the South Australian Government was offering a reward for the first successful north-south crossing of the continent, and after making two exploratory journeys to the north in 1859, Stuart set out in March 1860 to attempt such a crossing.

Stuart had an advantage over Sturt in that the intervening years had revealed the lakes to be passable and thus he was virtually able to begin his expedition at Chambers Creek at the southern tip of Lake Eyre, and to pass through known country as far as The Neales watercourse. Stuart reached the MacDonnell Ranges in the Northern Territory in April, and later the same month estimated that he had reached the centre of the continent. His attempt to reach the northern coastline was thwarted however, and in June he turned back. In a second attempt in 1861 he followed the same route and this time reached Newcastle Waters before being forced to return. At his third attempt Stuart was successful, reaching the sea on 24 July 1862 and establishing a route which was to be followed by the Overland Telegraph 10 years later. A special article on the Overland Telegraph Line was included on pages 526-31 of the South Australian Year Book 1972.

While Stuart was making his second attempt to reach the north, the ill-fated Burke and Wills expedition was crossing the continent further to the east. Their journey took them across the north-east corner of the State along much the same path as that followed by Sturt some seventeen years earlier. In 1861 and 1862 parties led by Alfred Howitt, who left from Melbourne, John McKinlay from Adelaide, were to pass through the same area in search of Burke and Wills. After finding traces of the expedition on Cooper Creek, McKinlay pushed east and then north, to reach the Gulf of Carpentaria.

The construction of the Overland Telegraph between 1870 and 1872, and the subsequent maintenance of this link between Adelaide and Darwin, naturally led to minor exploration of the adjacent country. At this stage attention turned to the land between the telegraph line and the settlements of Western Australia.

Foremost among the explorers of this region, and whose paths brought them within South Australia, were John Forrest and William Ernest Giles. In March 1870 Forrest left Perth for Adelaide, covering much the same path as Eyre had taken 30 years earlier. Forrest crossed South Australian territory again in 1874 when he travelled from Geraldton in Western Australia across the centre of the continent, coming down the Alberga watercourse to Peake telegraph station.

Giles had set out from the Overland Telegraph in 1873 at a point north of Oodnadatta, but was forced to return after covering approximately half the distance to the western seaboard. He tried again in May 1875, this time going south from Beltana to Port Augusta and then to Ooldea on a route which forty years later was to be closely followed by the east-west railway. From Ooldea the party went north for over 170 kilometres before again striking out to the west. Giles reached Perth in November, and three months later left Geraldton to return to South Australia on a route similar to that taken by Forrest two years earlier, arriving at Peake telegraph station in August 1876.

In 1873 W. C. Gosse, returning from an unsuccessful attempt to reach Perth from Alice Springs, discovered and named the Musgrave Ranges.

A number of persons other than those mentioned contributed to the exploration of the State, both in the period discussed and subsequently. The inhospitable nature of the country meant that many areas had to await the coming of the aeroplane before an accurate physical description could be recorded. One such expedition was that led by Donald Mackay in 1935 when the western half of the State north of the east-west railway line was aerially surveyed.

PART 3

## CONSTITUTION AND GOVERNMENT

## 3.1 SYSTEM OF GOVERNMENT

South Australia is one of the six Australian States (originally constituted by Acts of the Imperial Parliament) which at Federation in 1901 ceded many of their powers on matters of national importance (e.g. international affairs and defence) to the Australian Government. From time to time other powers on matters of local importance have been delegated to local governing bodies. As a result the people of South Australia are subject to the laws of a three-tier system of government. In addition statutory powers within specified fields are exercised by certain public corporations such as the State Bank of South Australia, the Electricity Trust of South Australia, the South Australian Housing Trust and the South Australian Meat Corporation.

Both the Australian and the South Australian Parliaments are bicameral: in each the leader of the Government (the Prime Minister of Australia and the Premier of South Australia) is seated in the Lower House and in each the Upper House has restricted powers concerning money Bills.

#### Electorates

The State is a single multi-member electorate for elections for both the Australian (Senate) and South Australian (Legislative Council) Parliaments. There are ten members elected from South Australia to the Australian Senate; these members are elected for a period of six years with half of them generally retiring each three years.

After the next general election, the South Australian Legislative Council will consist of twenty-two members elected for a term of six years, with eleven generally retiring each three years. At present there are twenty-one Legislative Councillors, eleven having been elected under the present system which was introduced by the Constitution and Electoral Acts Amendment Act, 1973 and ten under the system which applied before the election of 5 July 1975.

Although it is the respective Parliaments alone which have the power to make changes in the number, size, and distribution of electorates, it is customary to appoint electoral commissions to recommend in these matters.

The terms of the Australian Constitution provide for changes in House of Representatives electorates in certain eventualities, but in the South Australian Parliament changes in electorates for either House can be effected only by amendment to the State Constitution.

Because of a prescribed relationship between population and the distribution of House of Representatives electorates, Australian Government electoral commissions are usually appointed after each Census to consider the effect of changes in the distribution of population and, if necessary, to suggest alterations to the boundaries and distribution amongst the States of Lower House electorates.

In South Australia the boundaries of electorates are defined in a schedule to the State Constitution, and these have been changed from time to time on the recommendations of various Electoral Commissions which were appointed at irregular intervals with specific instructions as to how they should divide up the State. However, following an amendment to the Constitution in 1975, a permanent Electoral Commission was appointed in 1976 with instructions to divide the State into forty-seven House of Assembly electoral districts, each district having, as near as practicable, the same number of electors. This Commission also has the duty to review boundaries periodically to maintain equal numbers of electors in electorates.

## Party System

Most members of both the Australian and the South Australian Parliaments are elected by the voters from candidates pre-selected and endorsed by the major political parties. Once policy has been determined at a party meeting, members generally observe party solidarity; speaking, voting, and acting in accordance with that policy both in and out of Parliament whether the party be in government or in opposition.

## Cabinet and Executive Government

For both Australia and South Australia, executive government is based on the system which was evolved in Britain in the eighteenth century and which is generally known as 'cabinet' or 'responsible' government. Its main principles are that the head of the State, Her Majesty the Queen (or her representative, the Governor-General or Governor, acting on her behalf) should perform governmental acts on the advice of her ministers; that she should choose her principal Ministers of State from members of Parliament belonging to the party or coalition of parties commanding a majority in the popular House; that the Minister so chosen should be collectively responsible to that House for the government of the State; and that the Ministry should resign if it ceases to command a majority there.

The cabinet system operates chiefly by means of constitutional conventions, customs or understandings and through institutions that do not form part of the legal structure of government at all. The executive power of the Australian Government is exercisable by the Governor-General and that of South Australia by the Governor, each being advised by an executive council which only meets for formal purposes. The whole policy of a Ministry is in practice determined by some or all of the Ministers of State, meeting without the Governor-General or Governor under the chairmanship of the Prime Minister or Premier. This group of Ministers is known as the Cabinet.

#### The Cabinet

The Cabinet does not form part of the legal mechanism of government. Its meetings are private and deliberative, the actual Ministers of the day alone are present, no records of the meetings are made public and the decisions taken have in themselves no legal effect. At present the twelve senior Ministers of the Australian Government constitute the Cabinet and other Ministers only attend Cabinet meetings when required, but from 1972 to 1975 all Ministers were members of the Cabinet. In South Australia, all twelve Ministers are members of Cabinet.

As Ministers are the leaders of the party or parties commanding a majority in the popular House, the Cabinet substantially controls not only the general legislative program of Parliament, but the whole course of Parliamentary proceedings. In effect, though not in form, the Cabinet, by reason of the fact that all Ministers are members of the Executive Council, is also the dominant element in the executive government of the State. In summoning, proroguing or dissolving Parliament, the Governor-General or the Governor is usually guided by the advice tendered him by the Cabinet through the Prime Minister or Premier, although legally the discretion is vested in the Governor-General or Governor himself.

#### Executive Council

The Executive Council is usually presided over by the Governor-General or Governor, the members holding office during his pleasure. All Ministers of State must be members of the Executive Council. Australian Government Ministers remain members of the Executive Council on leaving office, but are not summoned to attend its meetings, for it is an essential feature of the cabinet system that attendance should be limited to the Ministers of the day.

The meetings of the Executive Council are formal and official in character and a record of proceedings is kept by the Secretary or Clerk. At Executive Council meetings the decisions of Cabinet are, where necessary, given legal form, appointments are made, resignations accepted, proclamations issued and regulations approved.

## Appointment of Ministers

Legally, Ministers hold office during the pleasure of the Governor-General or Governor, but in practice the discretion of the Oueen's representative in the

choice of Ministers is limited by the conventions on which the Cabinet system rests. When a Ministry resigns the Crown's custom is to send for the leader of the party which commands, or is likely to be able to command a majority in the popular House, and to commission him, as Prime Minister or Premier, to 'form a Ministry'—that is, to nominate other persons to be appointed as Ministers of State and to serve as his colleagues in the Cabinet.

#### Committees

At one stage in the consideration of every Bill each House resolves itself into Committee for freer discussion of proposed legislation than would be possible under the rules of formal debate usually applied in Parliament.

In addition there is a Committee system whereby a limited number of Members inquire into and report on particular matters thus enabling a greater volume of work to be handled more effectively. There are Joint Committees, consisting of members of both Houses, and each House has committees to attend to its own functions. Standing Committees (e.g. the South Australian Public Works Standing Committee) consider matters of a continuing or recurring nature, and ad hoc committees are formed to inquire into and report on specific matters as they arise.

Party representation on Joint and House Committees is usually proportionate to representation in Parliament or the appropriate House respectively.

#### Administration

The pattern of public administration in South Australia is determined by the division and delegation of statutory authority already mentioned. Various aspects and areas of administration are attended to by Australian and South Australian Government departments, by local government authorities, and by public corporations deriving authority and responsibility from either Australian or South Australian legislation. Within this framework numerous boards and committees exercise administrative and, in some cases, judicial powers.

These various levels of administration are largely interdependent and complementary. Some items of Australian Government legislation are completely, or almost completely, administered by State authorities, often in matters in which (the Australian and the South Australian Governments having concurrent powers) Australian Government legislation either supplements or supersedes State legislation, e.g. the South Australian Supreme Court applies the Matrimonial Causes Act 1959-1973 in this State. Performance of State functions by Australian Government authorities is neither as frequent nor as extensive, but there are instances of the provision of services or facilities, e.g. the Australian Electoral Office maintains the House of Assembly electoral roll; State Land Tax may be paid at Post Offices.

## Judicature

The degree to which South Australians are subject to the jurisdiction of Australian and South Australian courts respectively varies with the type of action. Most criminal and civil actions are heard, at least originally, in State courts, but many individuals are subject exclusively to jurisdiction of Australian courts in industrial matters.

Generally speaking, the decisions of the lower courts (the South Australian Magistrates and Local Courts) may be the subject of appeal to the State Supreme Court, and the decisions of this higher court, acting in either its original or appellate jurisdiction, may be the subject of appeal to the High Court of Australia.

Included in the jurisdiction of the High Court of Australia is the review of legislation to test its constitutional validity.

## 3.2 AUSTRALIAN GOVERNMENT

#### Federation

The Commonwealth of Australia was proclaimed on 1 January 1901 in 'An Act to constitute the Commonwealth of Australia', a statute of the Imperial Parliament, which received Royal Assent in July 1900. The draft constitution, which was enacted with only minor amendment, had been prepared at intercolonial conferences during 1897, 1898, and 1899, and was accepted at referenda during 1899 by South Australia, New South Wales, Victoria, Queensland and Tasmania, and in 1900 by Western Australia.

## Separation of Powers

The Constitution provides, in sections 52, 69, 86, 90 and 115, for certain powers to be vested exclusively in the Australian Government and, in section 51, for certain specified fields of interest to be common to both the Australian and State Governments; in cases of conflicting legislation, that of the former prevails to the extent of the inconsistency. All other fields of interest remain the exclusive province of the State Governments until amendment is made to the Constitution Act or until the State Parliaments cede particular powers.

#### Financial Resources

Since Federation the distribution of financial resources between the Australian and State Governments has been an almost constant problem. Under the original terms of the Constitution three-quarters of the net revenues from the duties of customs and excise, for ten years, was returned to the States; provision also existed for general and particular grants to the States. Significant changes have been made in the distribution of financial resources since 1910. These are reviewed in some detail in Part 11—Public Finance.

#### AUSTRALIAN LEGISLATURE

The Constitution provides that 'the legislative power of the Commonwealth shall be vested in a Federal Parliament, which shall consist of the Queen, a Senate, and a House of Representatives'. Provision for constitutional amendment includes a requirement that a proposed amendment must be submitted to a referendum.

#### Franchise

Qualifications for franchise are possessed by any British subject, not under eighteen years of age and not disentitled on other grounds, who has lived in Australia for six months continuously. Residence in a subdivision for a period of one month before enrolment is necessary to enable a qualified person to enrol. Enrolment and voting are compulsory except that the compulsory enrolment provisions do not relate to Aboriginal natives of Australia.

A member of the Defence Forces on service outside Australia who is a British subject not less than eighteen years of age and has lived in Australia for six months continuously is entitled to vote at Australian elections, whether enrolled or not.

Persons of unsound mind, attainted of treason, convicted and under sentence for any offence punishable by imprisonment for one year or longer or, persons who are holders of temporary entry permits under the *Migration Act* 1958-1973 or are prohibited immigrants under that Act are excluded from the franchise.

## Membership

Qualifications necessary for membership of either House of the Australian Parliament are possessed by any British subject, eighteen years of age or over, who has resided in Australia for at least three years and who is, or is qualified to become, an elector. The principal reasons for disqualification of persons otherwise eligible as members of either House are; membership of the other House, allegiance to a foreign power, being attainted of treason, being convicted and under sentence for any offence punishable by imprisonment for one year or longer, being an undischarged bankrupt or insolvent, holding office of profit under the Crown (with certain exceptions), or having pecuniary interest in any agreement with the Australian Public Service except as a member of an incorporated company of more than twenty-five persons.

## **EXECUTIVE GOVERNMENT**

## Governor-General

On 11 July 1974 His Excellency the Hon. Sir John Robert Kerr, KCMG, QC, was sworn in as the nineteenth Governor-General of Australia. His authority as the Queen's representative is derived from Letters Patent, Instructions under the Royal Sign Manual and Signet, and the relevant sections of the Australian Constitution.

### **Executive Council**

Members of the Federal Executive Council are chosen, summoned and sworn by the Governor-General and hold office during his pleasure. All Ministers are members. Councillors usually retain membership for life but it is customary for attendance at meetings to be limited to Ministers of the day.

## **Ministry**

Members of the forty-fourth Ministry (the second Fraser Ministry) are listed below.

## Fraser Ministry at 6 July 1976

## **Inner Cabinet**

Prime Minister

The Rt. Hon. J. M. Fraser, MP (Vic.)

Deputy Prime Minister, Minister for National Resources and Minister for Overseas Trade

The Rt. Hon. J. D. Anthony, MP (NSW)

Treasurer

The Hon. P. R. Lynch, MP (Vic.)

Minister for Primary Industry and Leader of the House

The Hon. I. McC. Sinclair (NSW)

Minister for Administrative Services, Leader of the Government in the Senate and Vice-President of the Executive Council

Senator the Hon. R. G. Withers (WA)

Minister for Industry and Commerce

Senator the Hon. R. C. Cotton (NSW)

Minister for Employment and Industrial Relations and Minister Assisting the Prime Minister in Public Service Matters

The Hon. A. A. Street, MP (Vic.)

Minister for Transport

The Hon. P. J. Nixon, MP (Vic.)

Minister for Education and Minister Assisting the Prime Minister in Federal Affairs

Senator the Hon. J. L. Carrick (NSW)

Minister for Foreign Affairs

The Hon. A. S. Peacock, MP (Vic.)

Minister for Defence

The Hon. D. J. Killen, MP (Old)

Minister for Social Security and Minister Assisting the Prime Minister in Child Care Matters

Senator the Hon. M. Guilfoyle (Vic.)

#### **Outer Ministry**

Attorney-General

The Hon. R. J. Ellicott, MP (NSW)

Minister for Business and Consumer Affairs

The Hon. J. W. Howard, MP (NSW)

Minister for Post and Telecommunications and Minister Assisting the Treasurer The Hon. E. L. Robinson, MP (Old)

Minister for Health

The Hon. R. J. D. Hunt, MP (NSW)

Minister for Immigration and Ethnic Affairs

The Hon. M. J. R. MacKellar, MP (NSW)

Minister for the Northern Territory and Minister Assisting the Minister for Natural Resources

The Hon. A. E. Adermann, MP (Old.)

Minister for Aboriginal Affairs

The Hon. R. I. Viner, MP (WA)

Minister for the Capital Territory

The Hon. A. A. Staley (Vic.)

Minister for Construction and Minister Assisting the Minister for Defence The Hon. J. E. McLeay, MP (SA)

Minister for Environment, Housing and Community Development The Hon. K. E. Newman, MP (Tas.)

Minister for Science

Senator the Hon. J. J. Webster (Vic.)

Minister for Repatriation

Senator the Hon. P. D. Durack (WA)

#### Salaries and Allowances

From 1 March 1975 the annual salary for each member has been \$20 000 with an electorate allowance of \$4 100.

The following additional payments are also made:

Prime Minister—\$27 000 plus expense allowance of \$10 900;

Deputy Prime Minister—\$12 500 plus expense allowance of \$5 200;

Ministers—\$10 500 plus expense allowance of \$4 875;

Speaker (House of Representatives)—\$10 500 plus expense allowance of \$4 250;

President (Senate)—\$10 500 plus expense allowance of \$4 250;

Chairman of Committees (House of Representatives)—\$4 000 plus expense allowance of \$900;

Chairman of Committees (Senate)-\$4 000 plus expense allowance of \$900;

Leader of the Opposition (House of Representatives)—\$10 500 plus expense allowance of \$4 875;

Deputy Leader of the Opposition (House of Representatives)—\$7 500 plus expense allowance of \$4 250;

Leader of the Opposition (Senate)—\$7 500 plus expense allowance of \$4 250;

Deputy Leader of the Opposition (Senate)—\$3 200 plus expense allowance of \$900;

Government Whip (House of Representatives) - \$2 500;

Other Whips (House of Representatives)-\$2 000;

Whips (Senate)-\$\square\$2 000;

Assistant Whips (House of Representatives and Senate)-\$500.

## Superannuation

The Parliamentary Retiring Allowances Act 1948-1973 provides for the payment of retirement benefits on the retirement or death of persons who have served as members of the Australian Parliament.

All members are required to contribute for a parliamentary retiring allowance at the rate of 11.5 per cent of the monthly amount of their parliamentary allowance. Members who retire involuntarily are eligible for a retiring allowance after eight years service (or less in certain circumstances), while those who retire voluntarily and have attained the age of forty-five years are eligible after twelve years service. Where there is no entitlement to a retiring allowance the benefit is a lump sum payment comprising a refund of contributions plus a supplement, the amount of which depends on length of service and whether retirement is involuntary or voluntary.

A former Prime Minister who is over the age of forty-five years and has held office as Prime Minister for not less than two years is entitled on retirement, in addition to the normal parliamentary retiring allowance, to a non-contributory Prime Minister's retiring allowance.

A parliamentary annuity is payable to the widow or widower of a serving member or of a former member in receipt of a retiring allowance at the rate of five-sixths of the retiring allowance that was or would have been payable to the deceased. The widow or widower of a Prime Minister is entitled to an additional annuity at the rate of one-half the additional retiring allowance that was or would have been payable to the former Prime Minister. An orphans annuity is payable to a dependent child if both parents have died.

#### THE SENATE

The Senate is the Upper House. Originally it was intended that this House should protect the rights and interests of the States, but with the growth of the parliamentary system of party-line voting, its role has become mainly that of a house of review.

## Representation

At present the Senate consists of sixty-four members—ten from each State, two from the Australian Capital Territory and two from the Northern Territory. The original provision was that each State, voting as a single electorate, should elect six Senators but by the Representation Act of 1948, which was effective for the 1949 elections, the number was raised to ten. By the Senate (Representation of Territories) Act 1973, the number of Senators was increased from sixty to sixty-four with the addition of two Senators from both the Australian Capital Territory and the Northern Territory. The Territories were represented in the Senate for the first time following the general election of 13 December 1975. Except in extraordinary circumstances each Senator is elected for a term of six years, five from each State and one from each Territory retiring every three years.

Following the rejection of vital legislation by the Senate in April 1974, the Governor-General, on the advice of the Prime Minister, dissolved both Houses of Parliament. This meant that at the general election held on 18 May 1974, all of the sixty Senate seats as well as the 127 House of Representatives seats were contested. A further double dissolution followed the deferral of Supply by the Senate in November 1975, and the subsequent general election for both Houses was held on 13 December 1975.

After the election of 13 December 1975 representation in the Senate was as follows:

State or Territory	ALP	LP	NCP	Others
New South Wales	5	4	1	
Victoria	4	4	2	
Queensland	4	3	3	
South Australia	4	5	_	1(a)
Western Australia	4	5	1	
Tasmania	4	5	_	1(b)
Australian Capital Territory	1	1		
Northern Territory	1		1	_

<sup>(</sup>a) Liberal Movement (LM).

ALP Australian Labor Party LP Liberal Party of Australia NCP National Country Party

The members representing South Australia in the Senate are:

## To Retire 30 June 1978:

Cameron, Donald Newton (ALP)
Young, Harold William (LP)
McLaren, Geoffrey Thomas (ALP)
Messner, Anthony John (LP)
Hall, Raymond Steele (LM)

To Retire 30 June 1981:

(LP)

Davidson, Gordon Sinclair (LP)
Bishop, the Hon. Reginald (ALP)
Jessop, Donald Scott (LP)
Cavanagh, the Hon. James Luke
(ALP)
Laucke, the Hon. Condor Louis

<sup>(</sup>b) Independent.

Elections for the Senate: Voting, South Australia

			Votes F	Recorded	Informal Votes		
Date of Electio	n	Electors Enrolled	Number	Percentage of Electors Enrolled	f Electors Number		
9 May 1953 10 December 1955		434 224 440 454 453 496 462 747 490 930	420 437 427 593 437 583 444 827 473 832	96·82 97·08 96·49 96·13 96·52	48 838 24 792 21 297 39 802 36 677	11·62 5·80 4·87 8·95 7·74	
9 December 1961 5 December 1964 25 November 1970 21 November 1970 18 May 1974 13 December 1975		521 396 551 341 594 480 639 807 750 308 789 004	501 312 528 464 568 823 609 268 722 434 759 369	96·15 95·85 95·68 95·23 96·28 96·24	28 284 39 421 32 864 42 306 82 191 75 540	5·64 7·46 5·78 6·94 11·38 9·95	

## Voting System

Before the election in 1949 the system of preferential voting was used for Senate elections, but for the 1949 and subsequent elections a system of proportional representation has been used. This system was discussed in detail on pages 55-6 of the South Australian Year Book 1971.

## THE HOUSE OF REPRESENTATIVES

#### Representation

The members of the House of Representatives (the Lower House) are elected in single-member electorates. The number of electorates into which a State is divided is determined by the proportion that the population of the State bears to the population of Australia as a whole. Section 24 of the Constitution provides that the number of members in the House of Representatives shall be as nearly as possible twice the number of Senators and prescribes the formula to be used, 'until the Parliament otherwise provides', for allocating to each State its share of the available seats, but stipulates that no original State shall have less than five members in the House. In addition one member is elected from the Northern Territory and two members are elected from the Australian Capital Territory. Preferential voting is used for elections for the House of Representatives.

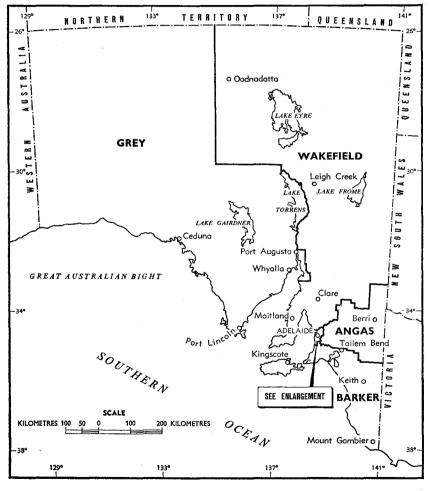
After the election of 13 December 1975 representation in this House was as follows:

Party	NSW	Vic.	Qld	SA			ACT		
ALP	17	10	1	6	1		1	_	36
LP	19	19	9	6	9	5	1	_	68
NCP	9	5	8	_				1	23

ALP Australian Labor Party LP Liberal Party of Australia NCP National Country Party

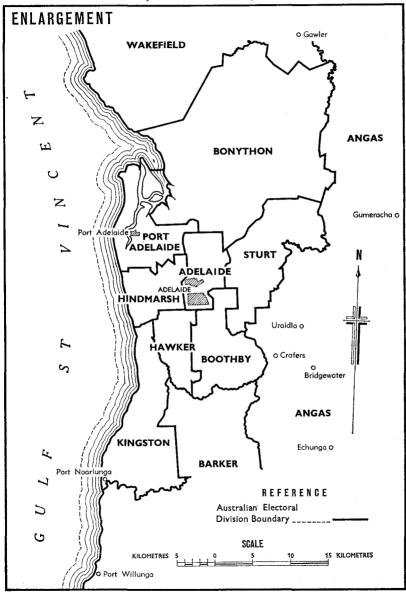
# SOUTH AUSTRALIA AUSTRALIAN ELECTORAL DIVISIONS

As proclaimed 21 November 1968



# PORTION OF SOUTH AUSTRALIA AUSTRALIAN ELECTORAL DIVISIONS

As proclaimed 21 November, 1968



House of Representatives, 1975 Election
Voting and Party Representation in South Australian Electorates

	T14	T21 4	Successful Ca	andidates	
Electorate	Electors on Roll	Electors Voting	Name	Party	First Preference Votes
Adelaide	62 416	59 421	Hurford, C. J.	ALP	28 621
Angas	59 054	56 883	Giles, G. O'H.	LP	37 981
Barker	66 395	64 409	Porter, J. R.	LP	36 894
Bonython		84 362	Nicholls, M. H.	ALP	41 363
Boothby	CO 0 10	60 701	McLeay, Hon, J. E.	LP	34 664
Grey	61 051	58 211	Wallis, L. G.	ALP	28 182
Hawker	62 253	60 059	Jacobi, H. R.	ALP	29 036
Hindmarsh	65 047	62 432	Cameron, Hon. C. R.	ALP	32 978
Kingston	76 260	73 766	Chapman, H. G. P.	LP	34 893
Port Adelaide	62 008	59 812	Young, M. J.	ALP	34 701
Sturt	72 159	69 975	Wilson, I. B. C.	LP	37 087
Wakefield	51 307	49 338	Kelly, Hon. C. R.	LP	32 070

## Elections for the House of Representatives: Voting, South Australia

	Electors		Recorded	Informal Votes		
Date of Election	Electors Enrolled		Percentage of Electors Enrolled	Number	Percentage of Votes Recorded	
10 December 1949	. 434 224	420 437	96.82	9 380	2.23	
28 April 1951	440 454	(a)384 082	(a)97.09	7 910	2.06	
29 May 1954	466 070		(a)96.77	8 812	2.46	
10 December 1955	. 462 747	444 827	96-13	18 050	4.06	
22 December 1958	. 490 930	473 832	96.52	15 619	3-30	
9 December 1961	. 521 396	501 312	96.15	15 629	3.12	
30 November 1963	. 541 536	523 135	96.60	13 963	2.67	
26 November 1966	. 585 465	563 341	96.22	16 220	2.88	
25 October 1969	. 624 626	599 719	96.01	20 562	3.43	
2 December 1972	. 671 081	644 211	96.00	16 845	2.61	
18 May 1974	. 750 308	722 434	96.28	20 311	2.81	
13 December 1975	. 789 004	759 369	96.24	18 201	2.40	

<sup>(</sup>a) Contested electorates only.

#### REFERENDA

Alteration to the Constitution must be initiated in the Australian Parliament and requires the approval of a majority of electors voting in a majority of the States as well as a majority of all the electors voting in Australia as a whole.

Of the thirty-two proposals so far submitted to the people of Australia for amendment to the Constitution, only five have been approved (one in each of 1906, 1910, 1928, 1946 and 1967). In addition proposals concerning compulsory overseas military service were submitted to the people in 1916 and 1917 respectively; both proposals failed to gain the necessary majority of votes.

At the most recent referendum, held at the same time as the general election of 18 May 1974, four alterations to the Constitution were proposed. All four proposals were defeated.

## 3.3 GOVERNMENT OF SOUTH AUSTRALIA

The Constitution Act, 1855-1856, which inaugurated the system of responsible government in South Australia, was passed and came into force on 24 October 1856. A summary of early constitutional history and the introduction of responsible government was included on pages 60-2 of the South Australian Year Book 1971.

### VICE-REGAL REPRESENTATION

Sir Mark Laurence Elwin Oliphant, KBE was sworn in as the Queen's representative in South Australia on 1 December 1971.

The title of the vice-regal representative has been varied from time to time. The first three holders of the Office were styled 'Governor and Commander-in-Chief', the next two, 'Lieutenant-Governor', and the following two, 'Captain-General and Governor-in-Chief'. The title then reverted to its original form until Federation in 1901. Since then, because of the appointment of a 'Governor-General and Commander-in-Chief in and over the Commonwealth', the holder of the State office has been described simply as 'Governor', and this title is used in the following table, which lists occupants of the office since the foundation of South Australia.

As titular head of the Government of South Australia the Governor exercises powers, duties, and functions, similar to those of a constitutional sovereign. On the one hand he is indirectly responsible to the Imperial Parliament through the Secretary of State for Foreign and Commonwealth Affairs, and on the other hand he usually acts on the advice of his Ministers, who take the responsibility for their advice. Nevertheless, the Governor retains important spheres of discretionary action and is thus enabled to maintain something of a safeguard against malpractice and injustice, particularly in extreme circumstances. To ensure continuity of services, the Governor has power to appropriate up to one per cent of the total amount appropriated from the State's general revenue by the Appropriation Acts for public service without specific Parliamentary authority.

#### Governors of South Australia

Name	From	To
Captain John Hindmarsh, RN, KH Lt-Col George Gawler, KH	17 October 1838	16 July 1838 15 May 1841 25 October 1845
Lt-Col Frederick Holt Robe	25 October 1845	2 August 1848

## Governors of South Australia (continued)

Name	From	To
Sir Henry E. F. Young	2 August 1848	20 December 1854
Sir Richard G. MacDonnell, CB	8 June 1855	4 March 1862
Sir Dominick Daly	4 March 1862	19 February 1868
Rt Hon. Sir James Fergusson, Bart	16 February 1869	18 April 1873
Sir Anthony Musgrave, KCMG	9 June 1873	29 January 1877
Lt-Gen. Sir Wm F. D. Jervois, GCMG,		
СВ	2 October 1877	9 January 1883
Sir Wm C. F. Robinson, GCMG	19 February 1883	5 March 1889
Rt Hon. the Earl of Kintore, PC,		
GCMG	11 April 1889	10 April 1895
Sir Thomas F. Buxton, Bart, GCMG	29 October 1895	29 March 1899
Rt Hon. the Lord Tennyson, KCMG	10 April 1899	17 July 1902
Sir George R. Le Hunte, KCMG	1 July 1903	18 February 1909
Admiral Sir Day Hort Bosanquet,	40.77.1	
GCVO, KCB	18 February 1909	22 March 1914
Lt-Col Sir Henry L. Galway, KCMG,	10 4 11 1014	20 4 . 11 1000
DSO	18 April 1914	30 April 1920
Lt-Col Sir Wm E. G. Archibald	0. 7 1000	20 37 1022
Weigall, KCMG	9 June 1920	30 May 1922
Lt-Gen. Sir George T. M. Bridges,	4 December 1022	4 Danishan 1027
KCB, KCMG, DSO	4 December 1922	4 December 1927
BrigGen. the Hon. Sir A. G. A. Hore-	14 May 1020	26 4 1 1024
Ruthven, VC, KCMG, CB, DSO	14 May 1928	26 April 1934
MajGen. Sir W. J. Dugan, KCMG, CB,	20 Tuly 1024	22 Echmony 1020
DSO	28 July 1934	23 February 1939
Sir Charles M. Barclay-Harvey, KCMG	12 August 1939	26 April 1944
Lt-Gen. Sir C. W. M. Norrie, KCMG,	19 December 1944	19 June 1952
CB, DSO, MC	19 December 1944	19 June 1932
Air Vice-Marshal Sir Robert A.	22 5 1 - 1052	7 M
George, KCMG, KCVO, KBE, CB, MC	23 February 1953	7 March 1960
Lt-Gen. Sir Edric M. Bastyan, KCMG,	4 4 1 1061	1 7 1060
KCVO, KBE, CB	4 April 1961	1 June 1968
MajGen. Sir James W. Harrison,	4 D	16 0
KCMG, CB, CBE	4 December 1968	16 September 1971
Sir Mark L. Oliphant, KBE	1 December 1971	

A Governor is normally appointed for a term of five years, but he can be reappointed for one or more subsequent terms. At present he is granted a basic salary of \$20 000 a year and an expense allowance which is altered in accordance with the Consumer Price Index number for Adelaide. The amount appropriated from Consolidation Revenue for the Governor's salary and allowances for 1975-76 was \$49 900.

In the absence or prolonged illness of a Governor other persons have been appointed to administer the government of the State. These persons have been variously styled 'Lieutenant-Governor', 'Deputy-Governor', 'Deputy Lieutenant-Governor', and 'Administrator', and several of them have held office more than once. The eighteen persons so appointed have been:

Name	Occupancy	y of Office	Occa	sions	Total I	eriod
Name	First	Most Recent	in C	ffice	Years	Days
George Milner Stephen	16/7/1838	3 17/10/1	838	1		93
Boyle Travers Finniss	20/12/1854	8/6/1	855	1.		170
Lt-Col Francis G. Hamley	19/2/1868	16/2/1	869	1		364
Maj. James Harwood Rocke .	6/4/1870	5/5/1	870	1		29
Hon. Sir Richard D. Hanson	7/12/1872	9/6/1	873	1	. —	184
Rt Hon. Sir Samuel J. Way,						
Bart	29/1/1877	17/11/19	915	65	6	117
William W. Cairns, CMG	24/3/1877	17/5/1	87 <b>7</b>	1		54
Hon, James P. Boucaut	26/10/1885	16/9/1	897	9		263
Hon. William H. Bundey	30/7/1888	9/8/1	888	1		10
Hon. Sir G. J. R. Murray,						
KCMG	25/9/1916			103	6	47
Hon. Thomas Slaney Poole	20/3/1925	22/11/1	925	2		240
Hon. Sir H. Angas Parsons .	11/6/193	5 19/2/1	942	6		54
Hon. Sir J. Mellis Napier, KCMG	21/4/1942	2 17/5/1	973	179	9	140
Hon. Sir Herbert Mayo	15/10/1946	9/1/1	965	25		187
Hon. Sir G. S. Reed	24/7/1951	4/11/1	957	5		31
Hon. J. J. Bray	25/6/1968	7/7/1	971	4	_	51
Hon. D. S. Hogarth	8/7/1971	8/7/1	971	1		1
Walter R. Crocker, CBE	7/9/1973	3 13/11/1	975	20		103

## CABINET AND EXECUTIVE GOVERNMENT

In South Australia all Ministers are members of the Cabinet and all Ministers are ex officio members of the Executive Council. Although the Governor may, subject to any law enacted by the Legislature, appoint other persons to the Executive Council, membership is in practice limited to Ministers of the day.

The Constitution Act of 1855-1856 provided that every Minister must be a member of either the Legislative Council or the House of Assembly or become a member within three months of appointment. However, in 1873 an amendment was made to the Act authorising the Governor to appoint an Attorney-General from outside Parliament; this provision was retained until 1953, and four Attorneys-General were so appointed.

The maximum number of Ministers has been varied from time to time. In 1856 the number was five; in 1873, six; 1901, four; 1908, six; 1953, eight; 1965, nine; 1970, ten; 1973, eleven; and 1975, twelve. In 1908 it was specified that no more than four Ministers were to be in the House of Assembly, but in 1953 this limit was increased to five, in 1965 to six, in 1970 to seven and in 1973 to eight. This restriction on the number of Ministers from the lower House was removed by the Constitution Act Amendment Act (No. 2), 1975, and now it is permissible for all Ministers to be selected from the House of Assembly.

The Constitution of 1856 provided for salary payments to Ministers only and salary payments to other members did not commence until 1887. The 1975-76 appropriation for salaries and allowances for twelve Ministers is \$343 200 which includes salaries and allowances received by Ministers as members.

Cabinet, as such, has no legal powers. Some Cabinet decisions result in the initiation and subsequent enactment of legislation; other decisions become legally binding through ratification by Executive Council or through powers vested in individual Ministers for the administration and control of their respective departments of government. In addition to government departments, statutory authorities also come under some degree of ministerial or parliamentary oversight.

#### **Premiers**

Since 1856 the following thirty-six persons have held the office of Premier.

## Premiers of South Australia

Name	Dates of Office		Total Period in Office		
Name	Dates of Office	Years	Days		
Hon. Boyle T. Finniss	24/10/1856- 21/8/1857		301		
Hon. John Baker	21/8/1857- 1/9/1857		11		
Hon. Robert R. Torrens	1/9/1857- 30/9/1857		29		
Hon, Richard D. Hanson	30/9/1857- 9/5/1860	2	222		
Hon. Thomas Reynolds	9/5/1860- 8/10/1861	2 1	152		
Hon. G. M. Waterhouse	8/10/1861- 4/7/1863	ī	269		
Hon. Francis S. Dutton	4/7/1863- 15/7/1863;	_			
	22/3/1865- 20/9/1865		193		
Hon. Sir Henry Ayers, KCMG	15/7/1863- 4/8/1864;				
	20/9/1865-23/10/1865;				
	3/5/1867- 24/9/1868;				
	13/10/1868- 3/11/1868;				
TT A-d TVI db	22/1/1872- 22/7/1873	4	35		
Hon. Arthur Blyth	4/8/1864- 22/3/1865;				
	10/11/1871- 22/1/1872;	•	254		
Hon, John Hart, CMG	22/7/1873- 3/6/1875 23/10/1865- 28/3/1866;	2	254		
Tion. John Hart, CMG	24/9/1868-13/10/1868;				
	30/5/1870-10/11/1871	1	339		
Hon. James P. Boucaut, oc	28/3/1866- 3/5/1867:	1	337		
Tion. Junes 1. Doucuat, Qc	3/6/1875- 6/6/1876:				
	26/10/1877- 27/9/1878	3	11		
Hon, H. B. Strangways	3/11/1868- 30/5/1870	ĭ	208		
Hon, John Colton	6/6/1876-26/10/1877;	•	200		
	16/6/1884- 16/6/1885	2	142		
Hon, William Morgan	27/9/1878- 24/6/1881	2	270		
Hon. John C. Bray	24/6/1881- 16/6/1884	2	358		
Hon, Sir J. W. Downer, KCMG, QC	16/6/1885- 11/6/1887;				
	15/10/1892- 16/6/1893	2	239		
Hon, Thomas Playford	11/6/1887- 27/6/1889;				
	19/8/1890- 21/6/1892	3	323		
Hon. J. A. Cockburn	27/6/1889- 19/8/1890	1	53		
Hon. F. W. Holder	21/6/1892-15/10/1892;				
Dt Hon C C Vingston og	8/12/1899- 15/5/1901	1	274		
Rt Hon. C. C. Kingston, QC	16/6/1893- 1/12/1899	6	168		
Hon. V. L. Solomon	1/12/1899- 8/12/1899		7		
Hon. Richard Butler	15/5/1901- 1/3/1905 1/3/1905- 26/7/1905	3	290		
Tion, Richard Dutter	1/3/1903- 20/7/1903		147		

## Premiers of South Australia (continued)

Nome	Dates of Office	Total Period in Office		
Name	Dates of Office	Years	Days	
Hon. Thomas Price	26/7/1905- 5/6/1909 5/6/1909- 3/6/1910; 17/2/1912- 3/4/1915:	3	314	
	14/7/1917- 8/4/1920	6	312	
Hon. John Verran	3/6/1910- 17/2/1912	1	259	
Hon. Crawford Vaughan	3/4/1915- 14/7/1917	2	102	
Hon. Sir H. N. Barwell, KCMG	8/4/1920- 16/4/1924	4	8	
Hon. John Gunn	16/4/1924- 28/8/1926 28/8/1926- 8/4/1927;	2	134	
Hon, R. L. Butler	17/4/1930- 13/2/1933° 8/4/1927- 17/4/1930;	3	160	
2.0 2 2 2	18/4/1933- 5/11/1938	8	210	
Hon, R. S. Richards	13/2/1933- 18/4/1933		64	
Hon, Sir Thomas Playford, GCMG	5/11/1938- 10/3/1965	26	125	
Hon. F. H. Walsh	10/3/1965- 1/6/1967	2	83	
Hon. D. A. Dunstan, QC	1/6/1967- 17/4/1968; 2/6/1970-		00	
Hon. R. S. Hall	17/4/1968- 2/6/1970	2	47	

#### Ministry

The Ministry is the sixty-third to hold office. The members at 30 November 1975 were:

Premier and Treasurer

Hon. Donald Allan Dunstan, QC, MP

Deputy Premier, Minister of Works and Minister of Marine Hon, James Desmond Corcoran, MP

Minister of Mines and Energy and Minister for Planning Hon. Hugh Richard Hudson, MP

Minister of Health and Chief Secretary
Hon. Donald Hubert Louis Banfield, MLC

Minister of Transport and Minister of Local Government Hon. Geoffrey Thomas Virgo, MP

Minister of Lands, Minister of Irrigation, Minister of Repatriation and Minister of Tourism, Recreation and Sport Hon. Thomas Mannix Casey, MLC

Minister of Education
Hon. Donald Jack Hopgood, MP

Minister of Agriculture, Minister of Forests and Minister of Fisheries
Hon. Brian Alfred Chatterton, MLC

Minister of Labour and Industry Hon. John David Wright, MP

Minister of Community Welfare Hon. Ronald George Payne, MP

Attorney-General and Minister of Prices and Consumer Affairs
Hon. Peter Duncan, MP

Minister for the Environment
Hon. Donald William Simmons, DFC, MP

## **PARLIAMENT**

Parliament is summoned, prorogued, or dissolved, by proclamation issued by the Governor. The two Houses of Parliament are the Legislative Council (Upper House) and the House of Assembly (Lower House). The following table gives the dates and the number of House of Assembly sitting days for Parliamentary sessions in recent years.

Parliamentary Session	Period	House of Assembly Sitting Days
1969	. 17/6/69-5/12/69	65
1970-71	. 14/7/70-8/4/71	75
1971-72	. 13/7/71-6/4/72	74
1972	. 8/7/72-24/11/72	54
1973	. 19/6/73-27/6/73	4
1973-74	. 24/7/73-28/3/74	69
1974-75	. 23/7/74-18/6/75	74

#### **Voting System**

Members for both Houses are elected by secret ballot; the preferential system of voting is used. In filling the vacancy for each House of Assembly District the candidate who has received the largest number of first preference votes is elected if this number constitutes an absolute majority (i.e. greater than one-half of the total formal votes). If no candidate has received an absolute majority of first preference votes a second count is made in which the second preferences of the candidate who has received the fewest first preference votes are distributed. This distribution of second preferences of the successive candidate with the fewest votes is repeated until one candidate has received an absolute majority of votes.

For Legislative Council elections before 12 July 1975, the State was divided into five 4-member electoral districts with two members for each district retiring at each Legislative Council election. The first vacancy in each district was filled in the same manner as those in the single-member House of Assembly districts discussed above. The second vacancy in each district was filled by re-arranging all ballot papers according to first preferences and allotting each ballot paper of the first elected candidate according to the second preferences. If a candidate then had an absolute majority he was elected, otherwise subsequent counts were made eliminating candidates with the fewest votes until one remaining candidate had received an absolute majority.

However, as a result of the passing of the Constitution and Electoral Acts Amendment Act, 1973, the number of electorates and the voting system has been changed for Legislative Council elections commencing with the election of 12 July 1975. This Act has increased the number of members of the Legislative Council from twenty to twenty-two and has introduced a system of proportional representation with the whole of the State as a single multi-member electoral district. Under the new system electors register preferences for groups of candidates rather than individuals (although a group may contain only one candidate) and a candidate's election depends on the proportion of votes his group obtains and his position within the group on the ballot paper. Because an optional preference voting system applies it is not necessary for electors to indicate preferences for each group in order to register formal votes.

## Members, Qualifications, and Privileges

Certain requirements must be met before a person qualifies for membership of the South Australian Parliament. The following persons are not eligible for membership of either House: Judges, persons under the age of eighteen, aliens, members of the Australian Parliament, persons who are not residents of South Australia, holders of contracts for the Public Service, occupants of offices of profit under the Crown, persons of unsound mind, persons attainted of treason, undischarged bankrupts and insolvent persons, and, amongst others, persons under sentence for any offence punishable by imprisonment for at least a year. Other requirements applicable only to one house or the other are mentioned on pages 78 and 79.

Each member is required to take an oath or make an affirmation of allegiance to the Crown before being permitted to sit or vote in Parliament. All members of the Parliament are entitled to such privileges, immunities, and powers as were held by members of the House of Commons on 24 October 1856, the date on which the Constitution Act came into force.

#### Franchise

The franchises for the separate Houses are shown on pages 78 and 79. South Australia was the first, at the general election of 25 April 1896, of the Australian States to give voting rights to women, and the existence of this provision in this State contributed to the decision to include full adult franchise in proposals for Federation. For the first eighty-five years of responsible government voting for both Houses of Parliament was voluntary but the Electoral Act Amendment Act of 1942 made voting for the House of Assembly compulsory for persons whose names appear on the House of Assembly Electoral Roll.

#### **Functions of Parliament**

The function of Parliament is to legislate for the peace, order, and good government of the State. Principal among the tasks of Parliament is the raising of revenue and the appropriation of funds for the development and maintenance of the State through its public services.

Legislation may be initiated by any member in either House except that money bills must be initiated by Ministers of the Crown in the House of Assembly; the Legislative Council may suggest amendments to money bills although it may not effect such amendments itself. Most bills are initiated by the Government as a result of the deliberations of Cabinet. The Opposition and Independent

members usually confine their activities to examination, criticism, and amendment, of Government measures. Legislation, other than to amend the Constitution, may be passed by a simple majority of the votes of the members present.

#### Constitutional Amendment

Alteration to the Constitution Act is in the hands of Parliament itself. An alteration to the Constitution requires at the second and third readings of the bill acceptance by a majority of all the members (not only those present or voting) of each House voting separately.

#### Deadlocks

A deadlock results from the refusal by the Upper House to pass the same (or substantially the same) Bill during two consecutive Parliaments, provided that a general election for the Lower House has been held between the refusals and that on the second occasion an absolute majority of all the members of the Lower House voted in favour of the Bill at its second and third readings. In the event of a deadlock between the Houses, provision is made for the dissolution of both Houses.

### Life of Parliament

The term of office of each Parliament is generally three years from the day on which it first meets for the dispatch of business but it may be prorogued or dissolved by the Governor before the expiration of this period.

Legislation introduced in 1933 extended the life of the twenty-eighth Parliament to five years and in 1937 the Constitution Act was amended for each subsequent Parliament to have a life of five years. However, the twenty-ninth Parliament repealed this provision and re-introduced three-year Parliaments.

### Number of Members and Electorates

Alterations made to the number of members and number of electorates for each of the two Houses are shown in the following table.

Date -				Legislativ	e Council	House of Assembly					
		L	alc				•	Members	Electorates	Members	Electorates
1856				• •			•••	18	1	36	17
1863								18	1	36	18
1875	٠.							18	1	46	22
1882								24	4	46	$\overline{22}$
1884(a)								24	4	52	26
1890								24	à	54	27
1902								18	4	42	13
1912(b)								18	À	40	12
1915								20	\$	46	19
1938						• •	• •	20	ξ.	39	39
1970	• •			• •	• •	• •	• •	20	5	47	39 47
1975	•••			• • •	•••	• •	• •	21	1	47	47 47

<sup>(</sup>a) Separate representation for Northern Territory.

<sup>(</sup>b) Cession of Northern Territory to Australian Government control.

The Constitution and Electoral Acts Amendment Act, 1973, assented to on 22 November 1973, increased the number of members in the Legislative Council from twenty to twenty-two and reduced the number of electorates to one with the whole State becoming a single electorate with members elected on a proportional representation basis. This amendment will not become fully effective for two general elections as only half the Legislative Councillors retire at each election and eleven members (not ten as previously) are now elected at each general Legislative Council election. At the general election of 12 July 1975, eleven members were elected to the Legislative Council and at present there are twenty-one members in this House.

The present allocation of twenty-eight metropolitan and nineteen country electorates for the House of Assembly was introduced on 12 March 1970 with the proclamation of the Constitution Act Amendment Act, 1969. Before this date there were thirteen metropolitan and twenty-six country House of Assembly electoral districts. The first election incorporating the present boundaries was held on 30 May 1970.

#### Salaries and Allowances

The annual salary from 1 February 1975 is \$16 500 per member with allowances of between \$2 500 and \$5 100 depending on the area of the member's electorate and the distance from the City of Adelaide. The following additional payments are also made:

Premier and Treasurer-\$16 500, plus expense allowance of \$2 600.

Deputy Premier-\$10 500, plus expense allowance of \$2 100.

Leader of the Government in the Legislative Council—\$10 000, plus expense allowance of \$2 000.

Other Ministers—\$9 000, plus expense allowance of \$1 750.

President of Legislative Council and Speaker of House of Assembly—each \$5 400, plus expense allowance of \$650.

Chairman of Committees, House of Assembly—\$2 700, plus expense allowance of \$290.

Leader of the Opposition, House of Assembly—\$9 000, plus expense allowance of \$1 750.

Leader of the Opposition, Legislative Council—\$3 500, plus expense allowance of \$550.

Deputy Leader of the Opposition, House of Assembly-\$3 500.

Government Whip-\$1 800.

Opposition Whip-\$1 800.

In addition allowances are paid to the members of the various Parliamentary Committees.

#### Superannuation

All members are required to contribute to a Superannuation Fund established under the Parliamentary Superannuation Act. 1974, which provides for the

payment of superannuation pensions to persons, or widows or widowers or eligible children of persons, who have served as Members of the State Parliament. No member can qualify for a pension until he has served a minimum of six years. The standard contribution to this fund is 11.5 per cent of salary, presently \$1898 a year, with optional additional contributions available to all Ministers and Officers of Parliament and Members of Parliamentary Committees. According to the length of service the pension payable to ordinary members varies between 41.2 per cent of salary (presently \$6.798 a year) and 75 per cent of salary (presently \$12.375 a year). Greater amounts of pension accrue to those members who have made additional contributions based on additional salary as a Minister or an office holder.

At 30 June 1975 there were sixty-seven contributors to the fund; twenty-two ex-members and twenty-one widows were in receipt of pensions.

## LEGISLATIVE COUNCIL

#### Members and Electorates

Before the passing of the Constitution and Electoral Acts Amendment Act, 1973, each member of the Legislative Council, in addition to fulfilling the general requirements mentioned on page 75, must have attained the age of thirty years, have been a British subject, and have resided in the State for at least three years. For the purpose of electing members to the Council the State was divided into five electorates each having four members. Each electorate normally elected two members every three years, and each member occupied his seat for a minimum of six years. When a casual vacancy occurred because of the death, resignation or disqualification of a member, such a casual vacancy was filled, at a by-election in the particular electorate, for the unexpired portion of the previous member's term.

Under the Constitution and Electoral Acts Amendment Act, 1973 the age limit was reduced to eighteen years and the State became a single electorate of twenty-two members with eleven members generally retiring each three years. At the first election held on this new basis, on 12 July 1975, ten members who had been elected on the former basis retired and eleven were returned under the new system, thus increasing the total number in the Legislative Council to twenty-one. This number will increase to twenty-two when ten members retire and eleven are returned at the next election. In future casual vacancies will be filled by a person chosen at a joint sitting of the members of both the Legislative Council and House of Assembly.

#### Franchise

Voting for the Legislative Council is voluntary for those persons whose names are on the Legislative Council Electoral Roll. Under the Constitution and Electoral Acts Amendment Act, 1973, all names which appear on the House of Assembly Electoral Roll are included on the Legislative Council Electoral Roll. Thus, all electors entitled to vote at House of Assembly elections are entitled also to vote at Legislative Council elections. Qualifications for House of Assembly electors are discussed below.

## President and Chairman of Committees

At the first meeting of the Council in each Parliament the members choose one from among their number to fill the position of President and Chairman of Committees. The person so elected is then entitled to a casting vote only.

#### HOUSE OF ASSEMBLY

#### Seat of Government

The House of Assembly can be regarded as the more important Chamber in that the Government of the day holds its position as such only so long as it controls a majority in this House. When it no longer controls such a majority in vital issues, particularly 'money bills', the Government must resign or go to the polls. Once defeated in the Lower House on a 'money bill' the Government is unable to finance the administration of the State.

#### Franchise

- A British subject at least eighteen years of age who:
  - (i) has lived continuously in Australia for at least six months, and in South Australia for at least three months, and in a Subdivision for at least one month immediately preceding the date of his or her claim for enrolment; or
  - (ii) is or has been (as qualified by the Constitution Act) a member of the Australian Naval, Military or Air Force, or a member of the Mercantile Marine, during any war in which Australia is or has been engaged:

is entitled to vote at an election for a Member of the House of Assembly if, at the time of the election, he or she is enrolled on the Electoral Roll for a Subdivision of the Assembly District in which the election is held.

Enrolment for the House of Assembly is not compulsory but in practice, as a consequence of the operation of the Australian and House of Assembly Joint Electoral Rolls, most persons enrolling for the Australian Electoral Roll are also enrolled for the House of Assembly.

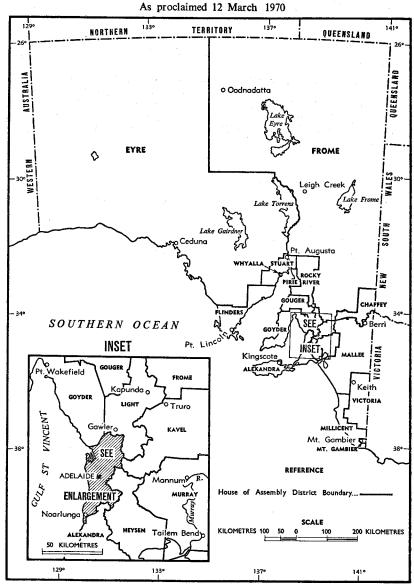
#### Membership

Subject to the exclusions mentioned on page 75 election to the House of Assembly is open to those eligible to vote in an election for the House. Members of this House are elected for a maximum of three years, for single-member districts. The seat of a member becomes vacant through his death, resignation or disqualification and, usually, is filled at a by-election.

#### Officers and their Functions

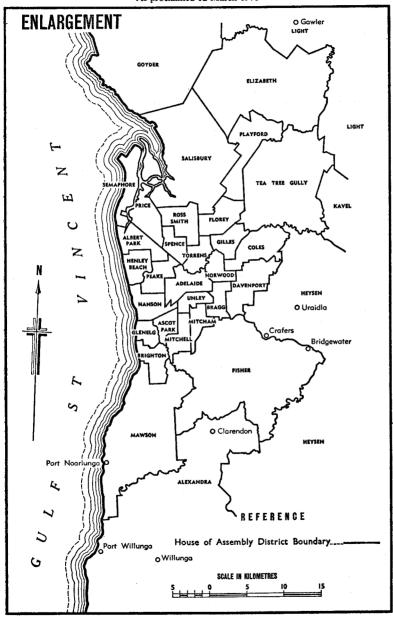
A Speaker presides over the House, and his election is the first business when a Parliament first meets. He presides over debate, maintains order, represents the House officially, communicates its wishes and resolutions, defends its privileges when necessary, and applies its procedure. The Speaker may exercise a casting vote only. There is also a Chairman of Committees elected by the House at the beginning of each Parliament; he presides over the deliberations of the House in Committee and acts as Deputy Speaker when required.

# SOUTH AUSTRALIAN ELECTORAL DISTRICTS



# PORTION OF SOUTH AUSTRALIA SOUTH AUSTRALIAN ELECTORAL DISTRICTS

As proclaimed 12 March 1970



Other officers of the Parliament include the Leader and Deputy Leader of the Opposition in either House and the various party whips whose function is to ensure that their party members are present in the House for divisions and other important business.

#### ELECTIONS AND PARTY REPRESENTATION

The following table gives details of the numbers of electors on the Electoral Rolls and voting in contested electorates for all general elections from 1947 to 1975.

South Australian Parliament: Voting at Elections, 1947 to 1975

	Le	gislative Coun	cil	House of Assembly  Contested Electorates			
Date	Cor	tested Elector	ates				
	Electors Enrolled	Electors Voting	Per Cent	Electors Enrolled	Electors Voting	Per Cent	
March 1947	155 847	124 826	80-10	306 059	285 765	93-37	
March 1950	68 347 97 968	52 954 79 373	77.48	311 658 354 273	290 306 336 592	93·15 95·01	
March 1956	22 963	16 002	81·02 69·69	334 273 299 048	280 811	93.90	
March 1959	86 278	70 007	81-14	426 340	400 531	93.95	
March 1962	118 218	98 786	83.56	444 197	417 462	93.98	
March 1965	186 899	149 910	80.21	542 436	513 064	94.59	
March 1968	275 701	262 328	95.15	609 626	575 948	94-48	
0 May 1970				635 533	603 952	95.03	
0 March 1973	383 758	357 971	93.28	696 <b>2</b> 90	655 937	94.20	
2 July 1975	771 414	719 753	93.30	771 414	721 770	93.56	

The following table shows the Party representation in both Houses of the South Australian Parliament resulting from each general election from 1947.

South Australian Parliament: Party Representation at Elections, 1947 to 1975

Data				Legislative Council			House of Assembly			
Date				-	ALP	LP	Other	ALP	LP	Other
March 1947		٠.	 		4	16	_	13	23	3
March 1950			 		4	16		12	23	4
7 March 1953			 		4	16		14	21	4
3 March 1956			 		4	16	_	15	21	3
7 March 1959			 		4	16		17	20	2
3 March 1962			 		4	16		19	18	2
March 1965			 		4	16		21	17	1
2 March 1968			 		4	16		19	19	1
30 May 1970			 		4	16		27	20	_
0 March 197			 		6	13	1	26	18	3
2 July 1975			 		10	9	$\hat{2}(a)$	23	20	4(6

<sup>(</sup>a) Liberal Movement.

<sup>(</sup>b) 2 Liberal Movement, 1 Country Party, 1 Independent.

ALP Australian Labor Party LP Liberal Party of Australia

At present there are forty-seven electorates represented in the House of Assembly, twenty-eight metropolitan and nineteen country. The table below shows the electoral returns for the general election held on 12 July 1975.

House of Assembly: Party Representation, 1975

	T T		Successful Candidate			
Electorate	Electors on Roll	Electors Voting	Name	Party	First Preference Votes	
Metropolitan:						
Semaphore	18 520 16 906 16 364 19 990 21 003 19 277 19 555 21 040 21 858 19 187 18 650 19 784 20 744 33 440 17 341 17 880 18 010 17 277 25 412 16 915 16 646 19 075 18 740 16 680	15 940 17 282 15 919 15 026 18 814 19 892 18 006 18 053 19 670 20 525 17 939 17 353 18 325 19 436 31 435 16 181 16 886 16 335 16 225 23 762 15 891 15 499 17 696 17 822 15 515	Wright, Hon. J. D. Harrison, C. A. Virgo, Hon. G. T. Tonkin, D. O. Hudson, Hon. H. R. Corcoran, Hon. J. D. Brown, D. C. Duncan, Hon. P. Evans, S. G. Wells, C. J. Slater, J. W. Mathwin, J. Becker, H. T. Broomhill, Hon. G. R. Hopgood, Hon. D. J. Millhouse, R. R. Payne, Hon. R. G. Dunstan, Hon. D. A., QC Simmons, Hon. D. W., DFC McRae, T. M. Whitten, G. T. Jennings, J. J. Groth, R. W. Olson, J. W. Abbott, R. K.	ALP	9 048 10 095 8 925 7 596 9 394 10 010 9 293 11 619 8 255 12 006 8 626 6 429 7 232 9 780 16 051 6 820 8 765 8 643 8 341 13 473 8 944 9 458 10 398 10 398 11 813 10 364	
Tea Tree Gully Torrens Unley	17 302	29 105 15 905 15 195	Byrne, Mrs M. V. Coumbe, J. W. H. Langley, G. R. A.	ALP LP ALP	15 331 6 144 7 579	
Country:  Alexandra Chaffey Eyre Flinders Frome Gouger Goyder Heysen Kavel Light	12 416 10 073 11 832 8 612 10 594 10 776 12 932 10 850	12 224 11 652 9 004 11 185 7 889 10 039 10 310 12 092 10 344 11 519	Chapman, W. E. Arnold, P. B. Gunn, G. M. Blacker, P. D. Allen, E. C. Russack, E. K. Boundy, L. D. Wotton, D. C. Goldsworthy, E. R. Eastick, B. C.	LP LP CP LP LP LM LP LP LP	6 270 6 281 6 478 5 561 4 242 4 580 4 563 5 588 5 292 5 211	

House of Assembly: Party Representation, 1975 (continued)

Electorate	Elector	Electors	Successful Candidate			
Electorate	Electors Electors on Voting Roll		Name	Party	First Preference Votes	
Country: (continued)	)					
Mallee	10 772	10 231	Nankivell, W. F.	LP	5 040	
Millicent	11 607	11 080	Vandepeer, M. S.	LP	4 195	
Mount Gambier .	12 452	11 805	Allison, H.	LP	4 084	
Murray	12 136	11 530	Wardle, I. A.	LP	6 078	
Pirie	11 095	10 537	Connelly, Hon. E.	IND.	4 351	
Rocky River	10 394	10 030	Venning, H. M.	LP	4 151	
Stuart	14 692	13 624	Keneally, G. F.	ALP	8 847	
Victoria	11 093	10 390	Rodda, W. A.	LP	6 500	
Whyalla	11 509	10 653	Brown, M. J.	ALP	6 735	

ALP Australian Labor Party CP Country Party LM Liberal Movement LP Liberal Party of Australia

Speaker: The Hon. E. Connelly, MP

Chairman of Committees: G. R. A. Langley, MP Leader of the Opposition: D. O. Tonkin, MP

Deputy Leader of the Opposition: E. R. Goldsworthy, MP

Government Whip: The Hon. G. R. Broomhill, MP

Opposition Whip: S. G. Evans, MP

Clerk of the House of Assembly: A. F. R. Dodd

The members of the Legislative Council after the general election of 12 July 1975 were as follows:

Banfield, Hon. D. H. L. (ALP)	DeGaris, Hon. R. C. (LP)
Blevins, Hon. F. T. (ALP)	Dunford, Hon. J. E. (ALP)
Burdett, Hon. J. C. (LP)	Foster, Hon. N. K. (ALP)
Cameron, Hon. M. B. (LM)	Geddes, Hon. R. A. (LP)
Carnie, Hon. J. A. (LM)	Hill, Hon. C. M. (LP)
Casey, Hon. T. M. (ALP)	Laidlaw, Hon. D. H. (LP)
Chatterton, Hon. B. A. (ALP)	Levy, Hon. J. A. W. (ALP)
Cooper, Hon. J. M. (ALP)	Potter, Hon. F. J. (LP)
Cornwall, Hon. J. R. (ALP)	Sumner, Hon. C. J. (ALP)
Creedon, Hon. C. W. (ALP)	Whyte, Hon. A. M. (LP)
Dawkins, Hon. M. B. (LP)	

President and Chairman of Comittees: Hon. F. J. Potter, MLC

Leader of the Opposition: Hon. R. C. DeGaris, MLC

Clerk of the Legislative Council: I. J. Ball

## Court of Disputed Returns

In South Australia, provision is made in the Electoral Act, 1929-1973, for the constitution of a Court of Disputed Returns which has jurisdiction to hear and determine all questions of disputed returns affecting either House of the State Parliament which are referred to it by the House concerned. No return on an election writ may be disputed, except by a petition to this Court. A subsidiary function of the Court is to hear petitions for exoneration from liability for failure to file certain electoral returns or vouchers under Part XIV of the Electoral Act.

The Court is constituted by the senior puisne Judge of the Supreme Court, or where he is not available by the puisne Judge next in order of seniority who is available.

The Court sits as an open court, usually at Parliament House Adelaide, and has power, inter alia:

- (a) to compel the attendance of witnesses and the production of documents;
- (b) to examine witnesses upon oath;
- (c) subject to any Supreme Court rules, to regulate the form and mode of its own proceedings;
- (d) to declare that any person who was returned as elected was not duly elected:
- (e) to declare any candidate duly elected who was not returned as elected;
- (f) to declare any election void;
- (g) to dismiss or uphold any petition in whole or in part;
- (h) to award any costs; and
- (i) to punish any contempt of its authority.

Most cases have related to House of Assembly elections. Since 1857, the Court of Disputed Returns has considered twenty-one petitions referred to it by the House of Assembly concerning the election of twenty-six members of that House. The Court's decisions in these cases are summarised hereunder:

Election voided and member unseated	15
Member unseated but other candidate declared to be duly	
elected	2
Petitions unsuccessful	2
Petitions dismissed	6
Petition withdrawn	1

#### REFERENDA

Since the inception of responsible government in South Australia in 1856 seven referenda have been held—the first in 1896 and subsequent ones in 1898, 1899, 1911, 1915, 1965 and 1970—and ten proposals have been submitted.

Three proposals related to education (1896) of which only one was approved; three were constitutional (1898 and 1899)—all approved; one related to Parliamentary salaries (1911)—not approved; one related to bar-room closing hours (1915)—favoured 6 p.m. closing; one related to the establishment of a lottery (1965)—approved; and one related to extended shopping hours in the metropolitan area—not approved.

The last referendum, held on 19 September 1970, asked House of Assembly electors in the Adelaide Metropolitan Planning Area and the Municipality of Gawler 'Are you in favour of shops in the Metropolitan Planning Area and the Municipality of Gawler being permitted to remain open for trading until 9 p.m. on Fridays?' Of the 463 629 electors qualified to vote 177 296 voted 'Yes' and 190 826 voted 'No'.

### ADMINISTRATION

The South Australian Public Service consists of thirty-six departments, many of which are very small. In the following list, the departments have been grouped according to Ministerial control.

#### PREMIER AND TREASURER

Hon. Donald Allan Dunstan, QC, MP

Premier's Department Treasury Department Department of the Public Service

Board

Valuation Department

Art Gallery Department

## DEPUTY PREMIER, MINISTER OF WORKS AND MINISTER OF MARINE

Hon. James Desmond Corcoran, MP

Engineering and Water Supply
Department

State Supply Department

Department of Marine and Harbors

Public Buildings Department

## MINISTER OF MINES AND ENERGY AND MINISTER FOR PLANNING Hon. Hugh Richard Hudson, MP

Mines Department

## MINISTER OF HEALTH AND CHIEF SECRETARY

Hon. Donald Hubert Louis Banfield, MLC

Hospitals Department

Police Department

Department of Public Health Auditor-General's Department Department of Correctional Services

General's Department Chemistry Department

Government Printing Department

## MINISTER OF TRANSPORT AND MINISTER OF LOCAL GOVERNMENT

Hon. Geoffrey Thomas Virgo, MP

Department of Transport

Highways Department

MINISTER OF LANDS, MINISTER OF IRRIGATION, MINISTER OF REPATRIATION AND MINISTER OF TOURISM, RECREATION AND SPORT

Hon. Thomas Mannix Casev, MLC

Department of Lands

Department of Tourism, Recreation and Sport

## MINISTER OF EDUCATION

Hon. Donald Jack Hopgood, MP

Education Department Libraries Department

## MINISTER OF AGRICULTURE, MINISTER OF FORESTS AND MINISTER OF FISHERIES

Hon. Brian Alfred Chatterton, MLC

Minister of Agriculture Department Department of Agriculture and Woods and Forests Department Fisheries

## MINISTER OF LABOUR AND INDUSTRY

Hon, John David Wright, MP

Department of Labour and Industry

## MINISTER OF COMMUNITY WELFARE

Hon, Ronald George Payne, MP

Department for Community Welfare

## ATTORNEY-GENERAL AND MINISTER OF PRICES AND CONSUMER **AFFAIRS**

Hon. Peter Duncan, MP

Attorney-General's Department

Public Trustee Department

Local and District Criminal Courts

Crown Law Department

Supreme Court Department

Registrar-General's Department

Department

Electoral Department

## MINISTER FOR THE ENVIRONMENT

Hon. Donald William Simmons, DFC, MP

Department for the Environment

## THE OMBUDSMAN

The office of the Ombudsman is established under the Ombudsman Act, 1972-1974. The Ombudsman is empowered to investigate complaints from members of the public concerning the administrative acts of State Government departments. State statutory authorities and local government councils.

The jurisdiction of the Ombudsman does not extend to Australian Government departments or authorities, judicial decisions, police actions, or actions by private individuals or companies.

A complaint to the Ombudsman is usually made by the person or enterprise directly affected by an administrative act, although, if the complainant is unable, a Member of the South Australian Parliament or some other person may act on his behalf. Complaints may be by telephone or personal visit, but it is preferable for a complaint to be in writing giving full details including copies of any correspondence with the authority concerned.

The Ombudsman has the powers of a royal commission but conducts his investigations in private. Complainants are informed of the final result of any inquiry and where appropriate progress reports are given while an investigation is proceeding. The Ombudsman service is provided free-of-charge.

During 1974-75, 1 162 complaints were registered and of those fully investigated, approximately 20 per cent were found to be justified fully or in part.

#### LEGISLATION

During 1975, 121 Public Acts were passed by the South Australian Parliament. Details of some of the more important legislation passed during this period are given below.

- Beverage Container Act, 1975 (No. 77). An Act to provide for the paying of refunds on certain containers and to prohibit the sale of certain other containers.
- Constitution Act Amendment Act, 1975 (No. 68) amended the Constitution Act, 1934-1975 to increase the number of Ministers from eleven to twelve.
- Constitution Act Amendment Act, 1975 (No. 122) amended the Constitution Act, 1934-1975 to ensure that the single member electorates of the House of Assembly are redistributed on the basis of equal numbers of electors in each electoral district at the direction of the Electoral Districts Boundaries Commission.
- Criminal Law (Sexual Offences) Amendment Act, 1975 (No. 66) amended the Criminal Law Consolidation Act, 1935-1974 and the Police Offences Act, 1953-1974 to provide for a code of sexual behaviour in society regardless of the sex or sexual orientation of the person.
- Fair Credit Reports Act, 1975 (No. 11). An Act to confer on consumers the right of access to accumulated credit information that might be used to their detriment.
- Land Tax Act Amendment Act, 1975 (No. 48) amended the Land Tax Act, 1936-1972 to provide for the equalisation of valuation levels throughout the State and to provide for a statutory exemption of \$40 000 on land used for primary production.
- Municipal Tramways Trust Act Amendment Act, 1975 (No. 117) amended the Municipal Tramways Act, 1935-1973 to dissolve the Municipal Tramways Trust and transfer its property, rights, powers, duties and liabilities to the State Transport Authority.
- Railways (Transfer Agreement) Act, 1975 (No. 60). An Act to approve and give effect to an agreement between the State and the Commonwealth of Australia relating to the acquisition with the consent of the State of certain railways of the State, and refer to the Parliament of the Commonwealth certain matters relating to or arising out of the agreement.
- Road Traffic Act Amendment Act, 1975 (No. 31) amended the Road Traffic Act, 1961-1974 to provide for the implementation of a major and minor roads system.
- Rundle Street Mall Act, 1975 (No. 52). An Act to provide for the establishment, management and operation of the Rundle Street Mall.

- Sex Discrimination Act, 1975 (No. 120). An Act to render unlawful certain kinds of discrimination on the grounds of sex or marital status, to provide effective remedies against such discrimination and promote equality of opportunity between men and women.
- South Australian Railways Commissioner's Act Amendment Act, 1975 (No. 105) amended the South Australian Railways Commissioner's Act, 1936-1974 to provide for the dissolution of the South Australian Railways Commissioner as a body corporate and the transfer of his property, rights, powers, duties and liabilities to the State Transport Authority.
- State Transport Authority Act Amendment Act, 1975 (No. 97) amended the State Transport Authority Act, 1974 in conjunction with the Municipal Tramways Trust Act Amendment Act, 1975 and South Australian Railways Commissioner's Act Amendment Act, 1975 transfers the powers of these two bodies to the State Transport Authority.
- Teacher Housing Authority Act, 1975 (No. 34). An Act to provide for the establishment of the South Australian Teacher Housing Authority to acquire land, and acquire or construct houses for teachers or officers of the Education and Further Education Departments.

#### **OVERSEAS REPRESENTATION**

South Australia is represented in London by the Agent-General for South Australia, at South Australia House, 50 Strand, London. As official representative of the State, it is the function of the Agent-General to work in close co-operation with the High Commissioner for Australia, to keep the State Government informed of political and economic developments overseas, to promote industrial development and investment in South Australia, to encourage immigration to the State and to foster trade with the United Kingdom and other countries. The present Agent-General and Trade Commissioner is Mr J. S. White.

### INTERSTATE REPRESENTATION

The South Australian Tourist Bureau maintains offices at 402 George Street, Sydney, NSW, and at 8 Royal Arcade, Melbourne, Victoria, to foster and facilitate tourist travel to South Australia.

#### CONSULAR REPRESENTATIVES

There are twenty-two countries represented in South Australia by consuls, vice-consuls, consular-agents or consul-generals.

Austria: John A. Nelson, Consular-General(a)

Belgium: Robert E. Porter, Consul

Britain: Eric W. Cook, Consul-General (b)

Derek Reed, Vice-Consul (Commercial) (b)

Denmark: Trevor R. Taylor, Consul

Dominican Republic: Peter H. D. Lathlean, Consul

Finland: Colin C. Verco, Consul France: Rex J. Lipman, Consul Germany: Bruce R. Macklin, Consul Greece: Vasille P. Apostol, Consul

Italy: Vacant

Japan: J. Langdon Parsons, Consul-General Lebanon: Archie M. Hambour, Consul Liberia: William B. Coombs, Consul

Mexico: Vacant

Netherlands: Ray Taylor, Consul Norway: John N. Howe, Consul

Peru: Max J. Hill, Consul

Philippines: J. Rolfe Sabine, Consul

Portugal: Raymond F. Walters, Consul (c)

Sweden: Mrs June Tanner, Consul

Switzerland: Paul A. Richter, Vice-Consul

United States of America: Thomas Manuel, Consular-Agent

- (a) Dean of the Consular Corps.
- (b) Consul de Carriere.
- (c) Secretary, Consular Corps.

#### STATE EMBLEMS

A description of the South Australian Coat-of-Arms, the State Badge, the State Flag and the Floral Emblem together with coloured illustrations was included on pages 94-5 of the South Australian Year Book 1970.

On 27 September 1970 the hairy-nosed wombat (Lasiorhinus latifrons) was adopted as South Australia's official Faunal Emblem,

# 3.4 PUBLIC CORPORATIONS

A public corporation is defined, for statistical purposes, as a body (other than a local government authority or body whose receipts and payments are included in the public accounts of the Australian Government, a State, or a Territory) created by or under legislation to carry out an activity or activities on behalf of a Government, or a body in which a Government has a controlling interest.

Some authorities, such as marketing boards which are set up by Acts of Parliament, are not regarded as public corporations because their activities are carried out on behalf of industries rather than on behalf of any Government.

Most public corporations have independent powers for the recruitment of staff. All possess greater administrative and financial autonomy than government departments but there is a wide variation in the degree of autonomy accorded, in various aspects, to different authorities.

Activities carried out by public corporations include tertiary education, hospital services, power supply, public transport, banking services, fire control, irrigation and drainage in rural areas, control and regulation of milk supply, slaughtering of animals for human consumption, housing development, off-course totalisators and lotteries, and investigation of problems relating to the development of mineral resources.

In appropriate parts of this Year Book reference is made to the activities of most of the public corporations which operate in South Australia.

# 3.5 LOCAL GOVERNMENT

# LOCAL GOVERNMENT AUTHORITIES

### Local Government Areas: Number, Size and Status

At 1 January 1976 there were 134 local government areas in South Australia. Each is controlled by a council consisting of members elected by local ratepayers and exercising powers under the Local Government Act, 1934-1975.

The total area incorporated in local government areas at 1 January 1976 was 149 847 square kilometres; this is only slightly above 15 per cent of the total area of the State but contains almost 99 per cent of the State population.

There are two major types of local government areas—district council areas and municipalities. Usually district council areas consist predominantly of rural land but contain one or more towns. Generally, to qualify for proclamation as a muncipality an area must be used predominantly for either residential, business, industrial, or manufacturing purposes (or a combination of these purposes), and be able to support itself financially. Some municipalities are constituted as cities, the qualification being 15 000 inhabitants for metropolitan municipalities (the twenty-one local government areas which form the metropolitan area as defined under the Local Government Act and which, before June 1966, corresponded to the statistical Urban Adelaide) and 10 000 persons in other areas.

Of the 134 local government areas at 1 January 1976, 38 were municipalities (including 24 cities) and 96 were district council areas.

The Governor may create, abolish, or vary the size, status, or organisation of, any local government area or portion thereof, provided certain requirements are satisfied. Such alterations usually stem from petition by ratepayers or a council.

As a result of legislation passed in 1969 district councils may apply to the Governor for mayoral status; in previous years only municipal councils had mayors. Since the legislation ten district councils, Berri, Clare, Gumeracha, Kanyaka-Quorn, Kapunda, Kingscote, Millicent, Loxton, Penola and Waikerie have been granted mayoral status.

#### **Functions of Local Government**

The Local Government Act, 1934-1975 prescribes most of the 'powers and a thorities' which each council shall or may exercise 'for the good government' and 'the management of the affairs' of its area, but some functions devolve from

other Acts. To enable it to sue and be sued and to participate in transactions involving the purchase and sale of land and other property each council is constituted as a corporate body.

The functions performed by councils vary somewhat with the area concerned, but there are general functions which are common to them all. Many of these functions receive more detailed attention in the parts of this book dealing with the appropriate subjects, e.g. road construction and maintenance in Part 8.3, Physical Development; health services and Local Boards of Health in Part 6.5, Social Environment, and libraries in Part 6.4, Social Environment. Among the many other functions of local governing authorities are the provisions of street lighting, the licensing and inspection of slaughterhouses, the maintenance of cemeteries, the maintenance of foreshores and jetties, the control of the location of industries (especially noisy trades), the prevention of fires within certain areas, and the policing of provisions relating to vermin and weeds. Councils also employ social workers and carry out functions in relation to social welfare.

#### Organisation and Representation

Whereas a municipality must be divided into at least two areas known as wards, a district council need not have wards; however, only four district councils have undivided areas. No council may comprise less than five members, and each ward in a municipality must be represented by two councillors. No district council area may be divided into more than ten wards, and the number of councillors for each ward is established by proclamation.

A candidate for election as a councillor must be an adult British subject owning or occupying ratable property within the area for which he seeks election. Special magistrates, undischarged bankrupts, persons holding contract or employment under the council, persons under sentence for crimes, persons overdue with council rates and any associated fines and persons of unsound mind are ineligible for election.

Each year half the number of councillors retire. In councils with wards one councillor from each ward, the one who has been 'the longest in office without re-election', retires; in other councils the councillors who did not retire one year do so the next. In all cases a retiring councillor is eligible for re-election.

Any municipality may apply to add no less than three and no more than six aldermen to its council. The qualifications for councillors apply to aldermen, except that aldermen are not bound by the limits of wards, and an alderman must have served at least one year as a member of the council. Although the functions of aldermen are not specifically defined the concept is that they should impartially consider the interests of the area as a whole and so resolve any conflict which may arise between sectional interests represented by councillors.

Mayors of municipalities and of certain district councils are elected annually on the same basis as aldermen. The chairman of a district council is chosen annually by councillors from among their number.

### Allowances

Council members, other than mayor or chairman, are not paid salaries or allowances, but may be reimbursed any expenses incurred in the performance of council business, and in the case of district councils, may be reimbursed the cost of travelling to and from council meetings.

The mayor or chairman receives an annual allowance which is determined at a council meeting in July of each year. This allowance, payable in advance, is to compensate for any expenses he is likely to incur in the execution of his official duty in the current financial year.

#### Franchise

British subjects, over the age of eighteen, who either own or occupy ratable property within an area are eligible to be enrolled for, and to vote at, elections for that area provided that they are not in arrears with their rates. The lawful spouse of an owner is deemed to be the occupier. Companies or corporations owning or occupying ratable property within the area are entitled to nominate up to three persons to vote on their behalf at the elections for that area, depending on the method of valuation; the entitlement is for the nomination of one vote for each \$300 of annual (improved) value of \$2 000 of unimproved (land) value or part of either, up to three voters for any one property. Special provision is also made to allow certain defence personnel to vote.

#### Officers and their Functions

Each council may appoint any officers it considers necessary to carry out its duties, including special constables to facilitate the maintenance of law and order within its area. Each council must appoint a town clerk (in a municipality) or a district clerk (in a district council) as the chief administrative officer, and an auditor.

Employment in local government administration is now regarded as a career; most town and district clerks are full-time employees, and councils are required to employ in those positions only those persons who have passed examinations qualifying them for the work. The town or district clerk maintains the voters roll and in many cases is appointed returning officer for elections. The characteristics of particular areas determine to some extent the nature of the duties performed by town and district clerks; they often undertake a very wide variety of functions, especially in smaller areas, where even the part-time employment of specialist officers for particular tasks is not warranted. Continuity of service between councils for long service leave and other purposes is provided for in the Local Government Act. The Minister of Local Government sets a minimum standard of superannuation benefits which must be made available to council employees. Other officers employed in local government are required to hold appropriate qualifications; these include engineers, overseers, building surveyors and inspectors, health inspectors and authorised weed officers.

The auditor for each council is appointed for a term of two years. He is not eligible for appointment unless he holds a Local Government Auditor's Certificate of competence issued by the Local Government Auditors Examining Committee.

Whenever a council itself undertakes a new assessment of property values within its area it is required under the Local Government Act to appoint a valuer who recommends to the council a valuation of each property for rating purposes. A ratepayer may appeal against a council's valuation of his own property or that of another ratepayer. Instead of undertaking its own assessment of property values it is now not uncommon for a council to adopt the valuations of the Valuation Department. When this is done a council avoids the necessity

of employing a valuer but a fee for each valuation is payable to the Valuation Department. There is no right of appeal to the council against valuations so based; in respect of the Government unimproved valuation the right of appeal lies against the Department when the valuation is made.

#### **Finance**

Local government authorities derive their revenue from many different sources, including sundry licences and fines, but the principal sources are rates, loans raised against the security of future rates, and government grants. The relative importance of these sources of revenue varies between areas and through time within areas, e.g. in closely settled well developed areas rate revenue is usually predominant; in large sparsely settled areas government grants, mainly for roadworks, may at times be the chief item of revenue; in areas being rapidly and extensively developed for housing or industrial purposes both government grants and loan funds may be prominent.

Specific purpose Australian Government grants, generally, are not made direct to local government authorities but are administered by appropriate State Government departments. The most important example of this is the distribution of portion of Commonwealth Aid Roads Grant to local government authorities by the Highways Department in conjunction with the State Treasury.

The Grants Commission Act 1973 provided for the Grants Commission to inquire into and report on applications from regional groups of local government bodies for financial assistance. The first report of the Commission resulted in South Australian councils receiving a total grant of \$4,774,000 for the financial year 1974-75. The Commission is currently considering applications for assistance for 1976-77.

A large proportion of local government expenditure from both loan funds and other revenue is for the construction and maintenance of roads, footpaths, and stormwater drains.

### Local Government Report

A major 'Report by the Local Government Act Revision Committee on Powers, Responsibilities and Organisation of Local Government in South Australia' was released early in 1970. The Report, prepared following the appointment of the Committee in 1965, is the first in Australia to investigate the functions and responsibilities of local government. The Committee received 8 470 pages of transcript and written submissions criticising 1 005 of the 1029 sections of the existing Act. The Committee has recommended that a new Local Government Act be prepared and that local authorities should be given wider powers to more effectively provide services and other assistance to ratepayers.

## Royal Commission into Local Government Areas

A royal commission appointed in 1973 to inquire into local government boundaries recommended that seventy-four new councils be created to replace the, then existing, 137 bodies. After considering the recommended changes, the South Australian Parliament decided against a compulsory imposition of the proposed alterations and referred the report back to the Commission to encourage changes on a voluntary basis.

# 3.6 TOWN AND REGIONAL PLANNING

# Legislation

In 1920 the South Australian Parliament passed the Town Planning and Development Act which followed the Control of Subdivision of Land Act of 1917. These Acts were the first of their kind in Australia. The Act of 1920 made provision for the preparation of town planning schemes and by-laws, for the appointment of a Government Town Planner and a Town Planning Department. The Department prepared plans for various areas, including Colonel Light Gardens and the townships of Iron Knob and Barmera. The Acts of 1917 and 1920 were repealed by the Town Planning Act, 1929 which dealt only with the control of land subdivision.

The Town Planning Act, 1929 was amended in 1955 to provide for a Town Planning Committee which was required to prepare a plan to guide the future development of the metropolitan area of Adelaide. The Committee considered the probable future population of the metropolitan area, the provision of public transport, adequacy of highways, provision of open spaces such as parks and sports grounds, the zoning of industrial districts, and the subdivision of land in relation to the economic provision of sewerage, water supply, electricity and gas services.

The Metropolitan Development Plan, together with its accompanying Report on the Metropolitan Area of Adelaide, was laid before both Houses of Parliament in October 1962, and an amendment to the Town Planning Act followed in 1963. The amendment required the Committee to call for and consider objections to the Plan as submitted to Parliament and the Committee was authorised to make regulations to implement the Plan.

The Planning and Development Act, which came into operation in 1967, repealed the Town Planning Act. It established an eleven-member State Planning Authority (with the Director of Planning as Chairman) and an independent Planning Appeal Board of four members. Provisions were made for the Planning Authority to implement and review the 1962 Development Plan, to prepare similar plans for other parts of the State and in conjunction with local government authorities to determine broad policies to guide the growth of towns and cities throughout the State.

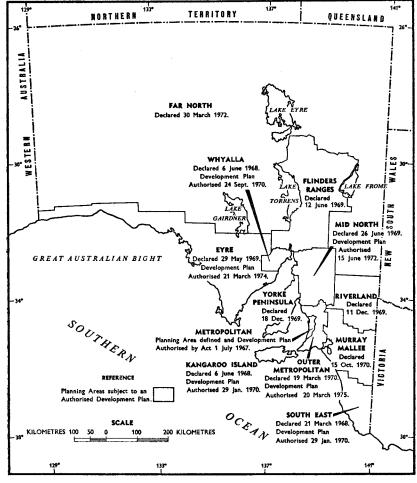
The Planning and Development Act Amendment Act, 1971 reconstituted the State Planning Authority to include a wider representation of experts in the fields of local government, conservation and aesthetics. Further amendments in 1972, 1973 and 1975 permitted the appointment of permanent commissioners to the Planning Appeal Board, established special interim provisions for the City of Adelaide, enabled the State Planning Authority to acquire and develop land within the Port Adelaide District Business Zone and prohibited subdivision of land within the Hills Face Zone.

### **Development Plans**

Twelve planning areas have been declared covering the whole of the State. Development plans have been authorised for eight of these areas, namely, Metropolitan (1 July 1967), South East (29 January 1970), Kangaroo Island (29

January 1970), Whyalla (24 September 1970), Mid North (15 June 1972), Flinders Ranges (8 February 1973), Eyre (21 March 1974) and Outer Metropolitan (20 March 1975). Work on preparing development plans for the remaining areas of the State is proceeding. In some parts of the State, such as in the Metropolitan area and Whyalla, the planning emphasis is on controlled development, whereas in the Flinders Ranges and Kangaroo Island, conservation of the natural resources and beauty of the area is being stressed.





The process of preparing a development plan involves a considerable amount of public participation. Local councils, government departments and interested groups and individuals are consulted during the preparation of the plan, and the general public is given the opportunity to comment on it during a two month public exhibition period. Following the receipt of any representations the State Planning Authority submits the development plan to the Minister in its original or amended form. The Minister in turn forwards the plan to the Governor with his recommendation for action.

The Governor may decide to authorise the plan, reject it, amend it, on the basis of the representations received or send it back to the Authority for further consideration. Although rather a lengthy process, it does mean that the public has an opportunity to participate in the future development and conservation of the State.

Where existing development plans need to be updated or revised, a similar process is put in motion for the preparation of a supplementary development plan. In the metropolitan planning area a supplementary development plan to amend the alignment of a number of major transportation routes was authorised on 4 November 1971. A supplementary development plan to redevelop 5.5 hectares of land at Hackney was authorised on 14 December 1972 and a further supplementary development plan for the development of the Willunga area was authorised on 12 July 1973. Work is proceeding on other supplementary development plans for those portions of the Mount Lofty Ranges west of the Hills Face Zone and within the Metropolitan Planning Area, for detailed development of the City of Adelaide, and to amend other proposals shown on the Metropolitan Development Plan.

## **Development Control**

Control of development in accordance with a development plan is by regulation and the State Planning Authority or the appropriate local government body can recommend to the Minister that regulations be made. Such regulations may, for example, deal with land use zoning or reservation of land for acquisition for a particular purpose. The regulations must be exhibited publicly and opportunity given for objections to be lodged before submission to the Minister. Any person aggrieved by a decision given under a regulation may appeal to the Planning Appeal Board with a subsequent right of appeal to the Land and Valuation Court.

Most local councils in the Metropolitan area have gazetted zoning regulations to control development within their areas. A number of councils in country areas have also taken steps to introduce zoning regulations. Many local authorities operate interim development control powers delegated to them by the State Planning Authority.

The State Planning Authority directly controls development in the Hills Face Zone, comprising the high land overlooking the Metropolitan Adelaide between Gawler and Sellicks Beach. The intention is to retain the rural character of the area. The State Planning Authority has interim development control over the area between Adelaide and Monarto, the Flinders Ranges Planning Area, the area around the proposed Redcliff petrochemical works, Kangaroo Island, some small portions of Metropolitan Adelaide and land fronting the River Murray.

The Authority is empowered to buy land, either by agreement or compulsorily, to assist in promoting development in accordance with the development plan, and a Planning and Development Fund exists in the Treasury to assist the Authority in carrying out this function.

By November 1975, 4 177 hectares of land had been acquired for major open spaces and regional parks in the metropolitan area at a cost of \$7,740,000. The Planning and Development Fund is also being used to acquire the properties comprising the Hackney redevelopment area.

The control of land subdivision throughout the State, with the exception of the City of Adelaide where there is no control, is vested in the Director of Planning and the local government authority in the area in which the land is situated. If permission to subdivide is refused, there is a right of appeal to the Planning Appeal Board.

The Minister for Planning is responsible for the administration of the Planning and Development Act and the Director of Planning heads the State Planning Office.

#### Monarto

A new city to cater for over 100 000 people is to be established in the vicinity of Murray Bridge, 80 kilometres south-east of Adelaide.

The Murray New Town (Land Acquisition) Act, 1972 authorised the State Planning Authority to acquire an area of not more than 10 000 hectares within 30 kilometres of Murray Bridge for the purpose of establishing a new city. Subsequently the area was changed to 16 000 hectares. A site for the city, to be named Monarto, has now been chosen and detailed planning is now proceeding.

The Monarto Development Commission is responsible for the implementation of the project which is expected to break ground in three or four years. The new city is to be planned with a broad economic base and will eventually attain self-government status. Development control around the site of the new city is the responsibility of the State Planning Authority.

#### **Coast Protection**

The Coast Protection Act, 1972 provides for the conservation and protection of the State's coastline, including its foreshore and beaches. A Coast Protection Board of five members has been established under the chairmanship of the Director of Planning. Its objectives are broadly to protect and restore the coast, to develop any part of it for enjoyment by the public and to carry out research.

The Board makes grants to local government authorities to assist them with conservation projects and to help them maintain boat launching ramps, car parks, grassed foreshore reserves and other public amenities. Loss of sand from several metropolitan beaches is a major problem and the Board is devoting technical and financial resources to a sand replenishment program.

Coast protection districts may be established for any part of the coast, after which management plans are to be prepared setting out the measures needed to protect the coast and secure its most appropriate use. Proposed developments that are contrary to the management plan may be refused by the Board subject to right of appeal to the Planning Appeal Board.

Two coast protection districts, Metropolitan and Yorke, were declared in 1973; Fleurieu Coast Protection District was declared in 1974; and the declaration of the Eyre, Spencer, South East and Kangaroo Island Coast Protection Districts will follow.

The management plan for the Metropolitan Coast Protection District which extends from Sellicks Beach to Port Gawler is expected to be completed in 1976. This will be followed by the management plan for the Yorke District which includes the coastline from Port Gawler to the northern boundary of the District Council of Port Broughton.

In 1974-75 the Coast Protection Board expended \$330 000 on foreshore protection repairs, improvements and restoration. Most of this work was undertaken by local government bodies who contributed a further \$59 000 towards the cost of the works. At 30 June 1975 a further \$920 000 had been committed to approved but, at that time, uncompleted projects.

|| | PART 4 ||

# LAND SETTLEMENT

# 4.1 LAND TENURE

# IDENTIFICATION OF LAND AND REGISTRATION OF TITLE

To facilitate the identification of land, the southern portion of the State encompassing all the arable land and certain pastoral areas has been subdivided into counties and these in turn have been generally subdivided into smaller units known as hundreds.

The first Surveyor-General, Colonel Light, had been instructed by the Colonisation Commissioners to divide the colony into towns and counties, and in 1842 the first nine counties were proclaimed. As the administration was having considerable difficulty in regulating the leasing of unsold lands for pasturage it was proposed in 1846 that boundaries of areas smaller than counties be created and the system of hundreds used in some counties in England was adopted.

The boundaries of early counties and hundreds followed natural features. As further counties and hundreds were declared, natural features suitable for boundary delineation were not always available and in most cases the boundaries were set parallel to lines of longitude and latitude.

In 1887 an area of 100 000 hectares was declared to provide for the town and irrigation area of Renmark on the River Murray. Similar areas were subsequently surveyed and proclaimed adjacent to other sections of the river.

There are currently forty-nine counties covering 23 per cent of the State, the last of these being declared in 1933. The counties have an average size of 463 000 hectares, varing from County Light, north of Adelaide, with 217 470 hectares to County Jervois on Eyre Peninsula with 959 000 hectares.

Counties are generally subdivided into hundreds, although four northern counties remain undivided and a number of others are only partly subdivided. There is considerable variation in the size of hundreds, while the number of hundreds in a completely subdivided county varies from eight in Counties Alfred and Kintore to thirty-four in County Jervois. New hundreds are created from time to time, the present total being 534. Hundreds are further subdivided into sections which in turn may be divided into allotments or occasionally blocks.

Land is therefore, for the purposes of title, identified by the county, hundred, and section, and, where appropriate, block or allotment within which it falls. Land in towns and in proclaimed irrigation areas may further be identified as falling within that town or area.

# Torrens System of Land Registration

Land transactions in South Australia are conducted under the Torrens System of land registration as provided by the Real Property Act, 1886-1975. This system, first introduced by the Real Property Act, 1858, was named after its author, Sir Robert Torrens, who was at that time Registrar-General of the Colony.

The Torrens System provides that the matter of title to land shall be a government responsibility. Each piece of land is represented by a certificate of title which, with very few (and in practice unimportant) exceptions, is guaranteed by the State. Retrospective examination which is necessary with general law title is eliminated and the costs and time involved in conveyancing can thus be kept to a minimum.

The Real Property (Registration of Titles) Act, 1945 provides for the small proportion of land then remaining under the general law to be converted to the Torrens System and this transition is still in progress in certain areas.

Details of property transferred are estimated from records available in the Stamp and Succession Duties Office. The following table shows the number and value of transfers of property for each of the five years to 1974-75.

			_	 •	
Year		 		 Number	Value (\$'000)
1970-71		 	 	 42 460	362 400
1971-72	•••	 	 	 47 712	447 800
1972-73		 	 	 63 524	694 800
1973-74		 	 	 67 799	983 600
1974-75		 	 	 49 052	808 800

#### **Property Transferred**

# SYSTEMS OF TENURE

# LAND ADMINISTRATION

Approximately 90 per cent of the occupied area of South Australia comprises Crown land held under lease and as such is controlled by the Department of Lands. This Department is charged with the general administration of Crown lands, and with making available under appropriate tenure newly developed lands and such lands as come into the hands of the Crown by resumption, expiry, surrender or forfeiture of existing tenure. The consent of the Minister

of Lands (or the Minister of Irrigation in the case of irrigated lands) is required before the transfer, mortgage or sublease of any of the forms of tenure administered by the Department.

Land available for leasing is allotted by the Land Board and, in the case of pastoral lands, by the Pastoral Board, who interview applicants and make allotments on merit. The Boards also advise the Minister on matters connected with land settlement.

Leases and licences under the various mining Acts are issued and supervised by the Department of Mines, while the Woods and Forests Department and the Engineering and Water Supply Department are responsible for the issuing of leases over reserves and areas under their control.

#### CURRENT TENURE

In the table below, occupied land in South Australia is classified according to its present form of tenure. Thus 'Area sold, dedicated, etc.' does not represent the accumulated total of all alienated lands as certain alienated lands repurchased by the Crown are currently held under leases.

At 30 June 1975 land in South Australia was occupied as follows:

	Area Hectares	Proportion Per Cent
Area sold, dedicated, etc.; Sold Free grants Dedicated (a) Under agreement to purchase	6 318 754 373 055 127 483 97 732	6·42 0·38 0·13 0·10
Total	6 917 024	7:03
Area under lease and licence (b); Perpetual Pastoral Other	554 340	8·64 51·86 0·56
Total	60 106 430	61.06
Area in occupation	67 023 454	68.08
Lakes and lagoons	3 198 943 96 311 28 118 970	3·25 0·10 28·57
Total area of State	98 437 678	100.00

- (a) Includes State forest reserves.
- (b) Includes areas held under Mining Acts.
- (c) Includes surveyed roads, railways and other reserves, 9 311 281 hectares; of which 7 930 215 hectares are set apart as Aboriginal reserves.

In 1901 the area sold, granted and leased, i.e. the area occupied, was 37 934 751 hectares, increasing to 57 472 548 in 1924, but falling to 52 370 744 in 1931 because of decreased areas under pastoral lease. Since 1931 there has been a fairly steady increase to the present figure of 67 023 454 hectares.

#### METHODS OF ALIENATING LAND

#### Sales under Agreement to Purchase

There is provision for Crown lands to be alienated through an agreement to purchase. The purchase money is payable over varying terms not exceeding sixty-four years and the purchaser must comply with certain special conditions concerning the improvement and the development of the land, including the fencing of the property within the first five years. It is not necessary for an agreement to run the full term as, subject to the Minister's approval, purchase may be completed after six years provided the purchaser has complied with all the necessary conditions. Land allotted under Agreements to Purchase amounted to 13 hectares in 1974-75.

#### Sales at Auction

Certain Crown lands may be sold at auction for cash. These include town lands, suburban lands exempt from the operations of the Land Board, and Crown lands which have been offered for lease and not taken up within two years. Town lands so sold are subject to limitations on resale and conveyance through mortgage during the first six years, and it is usually conditional that improvements, for an agreed function and of a certain minimum value, be erected within a stipulated period.

#### Free Grants and Reservations

A free grant of Crown lands may be made for any public purpose. Of the 373 055 hectares thus alienated at 30 June 1975, 310 798 hectares had been granted for the Weapons Research Establishment. Lands may also be dedicated and reserved for a variety of purposes such as forest reserves, Aboriginal reserves, national parks, conservation parks, recreation parks, parklands and schools.

## METHODS OF LEASING AND LICENSING LAND

#### Leases for Limited Terms

Pastoral lands outside the counties and large areas in the northern counties are held under pastoral leases granted for terms of forty-two years (except in the case of previously unoccupied lands when the term is twenty-one years) or for shorter terms where the land may be required for other purposes. Under the conditions of these leases the lessee must expend in improvements a sum as recommended by the Pastoral Board and must comply with certain conditions on stocking. Rent is based on the carrying capacity of the land, the distance from markets and the proximity of transport facilities, and, in the case of recent leases, is reviewed every seven years. Such lands may be reallotted to the same lessees on expiry of the existing terms.

Persons may be granted a permit to search for water and if successful may take up a lease of 250 square kilometres of land. Such leases are granted for forty-two years at a nominal rental for the first ten years and a low rental thereafter. Conditions of stocking are also modified.

In certain circumstances, for example, where land has not been surveyed or its potential is uncertain, or where permanent alienation is not desirable, miscellaneous leases are issued for periods up to twenty-one years. Certain business and industrial sites may also be held under miscellaneous lease. Annual licences may be granted over Crown lands for certain industrial sites, grazing areas, fishermen's residences, holiday shack sites and other approved purposes.

Land reserved for the Woods and Forests Department was leased for cultivation or grazing purposes for a period not exceeding forty-two years. At 30 June 1975, 388 hectares of forest land were under lease.

#### Perpetual Leases

Leases in perpetuity may be offered over Crown lands which have been surveyed or delineated on the public maps. The lessee is required to provide boundary fencing and may be required to clear and render available for cultivation a certain proportion of the land within a specified period.

In certain cases special perpetual leases are available under which no rent is payable for the first four years, and with less than full rent over the next six years.

Sections in government controlled irrigation areas are offered on perpetual lease and, if the land has not been cultivated previously, rents and water rates are payable on a sliding scale for the first three years. Certain improvements are required to be made. Town allotments in irrigation areas may be offered under perpetual lease either at auction, by calling applications, or may be let on annual licence. Allotments may also be offered at auction for cash or for agreement to purchase. Allotments not sold at auction may be sold by private contract.

During 1974-75, 10 hectares in irrigation areas were allotted under perpetual leases.

## MINING CLAIMS, LEASES AND LICENCES

## Legislation

The Mining Act, 1971 which repealed the Mining Act, 1930-1962, was assented to in December 1971 and came into force on 3 July 1972. The current legislation is the Mining Act, 1971-1975.

Under the present Act, all claims current at 3 July 1972 remained in existence for twelve months irrespective of their previous termination date; the rights of current 'Authority to Enter' holders were protected for twelve months from that date; and a person lawfully mining on 'private land' immediately before the commencement of the new Act was able to continue mining for six months from that date and longer if he officially declared the mine to be a 'private mine'.

The pegging of new claims and granting of leases and licences is now governed by the current Act and its regulations.

Tenements He	eld	Under	Mining	Acts,	South	Australia	
		At	30 June				

Particulars	1971	1972	1973	1974	1975
Mineral claims	1 498	1 394	1 330	415	159
	846	1 015	1 810	1 472	918
	1 009	1 183	1 188	1 477	1 425
	167	117	71	60	73
	24	23	24	21	17

<sup>(</sup>a) Formerly Special Mining Leases under the repealed Mining Act, 1931-1962.

A total of 282 private mines were current at 30 June 1975. Mineral royalties received by the Department of Mines during 1974-75 amounted to \$1 998 844.

### Minerals Resumed

The mineral rights on private land have been resumed by the Crown so that all minerals are now the property of the Crown and there are no 'lands with the mineral rights alienated by the Crown' with different conditions applying to them. However, if minerals (other than extractive minerals) which have been resumed under the Mining Act, 1971-1975 are mined at any time in the future, any royalties collected upon the minerals recovered are payable to the person so divested of his property in minerals upon his application.

A royalty of 2.5 per cent (5 per cent for extractive minerals) of the value of the minerals, immediately upon recovery from the earth, is payable to the Minister of Mines and Energy on all minerals (except precious stones) recovered and sold or used for commercial purposes. No royalty is payable on precious stones. Royalty for extractive minerals is payable to the Extractive Areas Rehabilitation Fund.

#### **Extractive Minerals**

Extractive minerals are defined as sand, gravel, stone, shell, shale or clay but not fire-clay, bentonite or kaolin. No person is permitted to peg claims for extractive minerals on freehold land other than the person who, immediately before the operation of the Mining Act, 1971 held the mineral rights or had rights to mine the minerals by holding a claim or lease over the deposit. Normal pegging rights apply to extractive minerals on other than freehold land or exempt land, and also apply to other minerals on freehold land.

Under the present Act, all the royalties collected from the mining of extractive minerals are paid into an 'Extractive Areas Rehabilitation Fund' to be used in rehabilitating land disturbed by the mining of or searching for extractive minerals. The Fund may also be used for research into methods of mining engineering and practice with a view to reducing environmental damage or impairment. Receipts into this Fund during 1974-75 amounted to \$473 707.

#### General Conditions

A current miners right or, in the case of precious stones, a precious stones prospecting permit must be held by every prospector to authorise the pegging of the appropriate class of claim.

At least three weeks notice of entry for prospecting or mining purposes must be given to the landowner if the land is freehold or held on perpetual lease. Three weeks notice must also be given to the landowner before 'declared equipment' can be used on his land. In either case the landowner may lodge an objection with the Warden's Court.

A claim (other than a precious stones claim) has a maximum term of twelve months, is not transferable and must be converted to a lease before minerals can be removed for sale or used for commercial purposes.

A mining lease may be granted after twenty-eight days notice in the South Australian Government Gazette for a term of up to twenty-one years with certain rights of renewal. A mining lease is transferable with the Minister's consent and an annual rent is payable on a mining lease. Nineteen-twentieths of the rent collected on a lease on freehold land is paid to the landowner.

Exploration licences replaced Special Mining Leases as used under the old Act. They have a maximum life of two years and a maximum area of 2 500 square kilometres and are subject to the terms agreed. Twenty-eight days notice must be given in the South Australian Government Gazette before an exploration licence is granted.

Mining leases and exploration licences are granted only under conditions which give proper consideration to the protection of the natural environment.

# 4.2 LAND SETTLEMENT SCHEMES

### CLOSER SETTLEMENT

There is provision in the Crown Lands Act for acquisition of land for subdivision to encourage closer settlement. Such land is divided into blocks and offered under conditional agreements to purchase with payment over thirty-five and sixty-four year periods.

No land has been purchased for closer settlement since 1952-53, by which time 384 298 hectares had been purchased at a cost of \$5 730 400, including 21 008 hectares set apart for returned service personnel from the 1914-18 War, 1 302 hectares for forest and water conservation purposes and 10 758 hectares purchased in connection with the reclamation of River Murray swamp lands.

At 30 June 1975 a total of 53 313 hectares of closer settlement lands were held under agreement to purchase or lease.

#### MARGINAL AREAS ASSISTANCE

The excessive opening up of the drier marginal lands for wheat growing resulted in many settlers in these areas being forced to leave their holdings, particularly in the 1930s.

Investigations showed that if the settlers were to succeed, cereal growing would need to be replaced by grazing. The Australian Government established a Marginal Lands Improvement Fund to assist this development. The money was used to purchase properties from certain settlers with a view to enlarging the holdings of others, to provide fencing and water supplies and to pay small grants to settlers vacating holdings in which there was no equity.

The fund was provided by the Australian Government under the Wheat Industries Assistance Act 1938. An amount of \$1 426 000 was allocated to South Australia. By arrangement with the Australian Government the rentals and income from sales of improvements on marginal lands which had been subject to adjustments under the above fund are retained as an additional fund to be used for assistance to settlers in marginal areas. Receipts for 1974-75 amounted to \$25 400.

During 1967-68 an amount of \$150 000 was transferred from this fund to the Farmers Assistance Fund. No advances were made from this fund during 1974-75. The balance of the fund at 30 June 1975 was \$396 115.

#### CROWN LANDS DEVELOPMENT

The Crown Lands Development Act, 1943-1973, administered by the Department of Lands, provides for the development of Crown lands, or lands which the Department may purchase, and for the allotment of such lands to suitable settlers.

A substantial proportion of the land under the Act was developed with the object of inclusion in the War Service Land Settlement Scheme. Properties not accepted for the scheme were subsequently allotted under the Act, and since then a number of individual properties have been surrendered to the Crown for development and re-allotment to the former holders.

### ASSISTANCE FOR RETURNED SERVICE PERSONNEL

#### 1914-18 WAR

Following the 1914-18 War the State Minister for Repatriation was authorised to acquire land for the purpose of re-settling discharged servicemen. Such land could be purchased by agreement or acquired compulsorily, whether held in fee simple or under Crown lease. Crown lands could also be set apart for this purpose. The land acquired was subdivided where appropriate and offered under agreement to purchase, perpetual lease or a term lease. Provision was also made for the discharging of existing mortgages on freehold properties already held by ex-servicemen, with fresh mortgages in favour of the Minister of Repatriation.

In all, 3 801 ex-servicemen were settled under this Act with 3 008 settling in 'dry lands' and 793 in irrigation areas.

### 1939-45 WAR AND KOREA-MALAYA OPERATIONS

#### War Service Land Settlement

Under the War Service Land Settlement Scheme, provision was made for the settlement on rural holdings of certain ex-servicemen from the 1939-45 War and Korea and Malaya operations.

Suitable Crown land was made available and other land was acquired. This land was subdivided and developed to a stage where it could be brought into production by the individual settler within a reasonable time. Basic structural improvements were provided and it was then offered to eligible settlers on perpetual lease. Credit facilities are available to these settlers for working capital, the purchase of stock and equipment, and the effecting of further improvements.

During the first year after allotment in the case of 'dry lands' settlers, and the first year after an irrigation holding became self-supporting the settler was granted a living allowance and was exempted from the payment of rent or interest in respect of the holding, and of payments on account of principal or interest in respect of advances, other than advances for working capital. Provisions exist for a settler on 'dry lands' to convert property to freehold after a period of ten years by the payment of a fixed purchase price and the repayment of all advances. There is no provision for freeholding in government irrigation areas.

The following table shows for recent years the number of farms allotted and total expenditure under the War Service Land Settlement Scheme.

War	Service	Land	Settle	ment,	South	Αu	stra	lia
Farms	Allotted	and	Total	Expe	aditure	to	30	June

Particulars	1972	1973	1974	1975
Farms allotted:				
Number	1 032	1 032	1 032	1 032
Area ('000 hectares)	285	285	285	285
Expenditure:		\$'0	000	
State	8 250	8 452	8 671	9 173
Australian Government:	0 200			,
Acquisition of land	6 837	6 837	6 837	6 846
Development and improvement of	0 00.		0 00.	00.0
land	31 558	31 684	31 701	31 686
Provision of credit facilities	37 663	38 765	40 011	41 458
Other	13 580	14 071	14 496	15 143
	15 500	1+0/1	17 770	15 145
Total expenditure by Australian				
Government	89 638	91 357	93 045	95 133
Government	07 030	71 331	23 043	75 155
Total expenditure	97 888	99 809	101 716	104 307
Total expellentere	<i>71</i> 000	<i>37</i> 00 <i>3</i>	101 /10	104 307

The Department of Lands administers the War Service Land Settlement Scheme on behalf of the Australian Government. The Australian Government provides the funds and meets the costs of the scheme with the exception of administration costs and two-fifths of any losses, which sums are met by the South Australian Government.

All large scale development operations under the scheme have now been completed. The principal areas settled are in the South East, on Kangaroo Island, Eyre Peninsula, and in irrigation areas along the River Murray.

## Loans and Allowances (Agricultural Occupations) Scheme

The Australian Government through the State Bank of South Australia provided financial assistance for the establishment or re-establishment of exservicemen in agricultural occupations. Loans were made for a variety of purposes and non-repayable allowances were made where income during the course of re-establishment proved to be inadequate. The payment of allowances and the advancing of new loans ceased in 1956-57 by which date loans totalling \$2 009 096 had been made to 1288 ex-servicemen, and allowances totalling \$649 218 had been granted to 2 264 ex-servicemen.

An additional Marginal Lands Improvement Fund was established in 1943 from which expenditure of \$416 476 had been made to 30 June 1975 by the Department of Lands.

### SOUTH AUSTRALIAN LAND COMMISSION

The South Australian Land Commission was established in November 1973 under the provisions of the Land Commission Act, 1973. The functions of the Commission are to acquire, manage and develop land for present and future urban expansion with the primary objective of providing land for persons with limited financial resources.

Financial assistance was provided by the Australian Government under the Urban and Regional Development (Financial Assistance) Act 1974. During 1974-75 the Commission received an advance of \$18 798 000 for the acquisition of land and land development purposes and a grant of \$2 034 000 for Metropolitan Open Space purposes.

Advances from the Australian Government are repayable over a period of thirty years from the date of the advance together with interest at the long-term bond rate current at the date of the advance. Grants are made on the basis of \$2 for each \$1 of expenditure from State funds. The State's share of expenditure was provided out of funds of the State Planning Authority.

Land purchased or acquired by the Commission for urban purposes during 1974-75 was 1920 hectares within localities designated for urban development in the Metropolitan Development Plan and 1094 hectares of land within localities designated for Metropolitan Open Space. Of the 3014 hectares purchased or acquired by the Commission, 1966 hectares were purchased by agreement and 1048 hectares were compulsorily acquired.

The Commission's first completed subdivision at Happy Valley was officially opened on 11 April 1975. The subdivision comprised 298 fully-serviced residential allotments of which 130 were included in the first release.

#### PRIVATE LAND DEVELOPMENT SCHEMES

The most important private scheme in South Australia has been a project, begun in 1949 by the Australian Mutual Provident Society, to develop a large area of land in the south-east of the State in what was previously known as the Ninety Mile Desert. The development of this area was made possible by the discovery that the retarded nature of the country was caused by certain soil deficiencies, and that these deficiencies could be overcome by the addition of trace elements (mainly copper sulphate and zinc sulphate) to the soil.

Large tracts of unimproved land were obtained either by purchasing existing leases or by Crown allotment. Intending settlers were employed by the Society in the development work, covering a period of approximately five years, and were then allotted a holding over which they had a perpetual lease title. The Society provided finance for the purchase and for stock, plant and working expenses. In all, 38 880 hectares were taken up by employees of the Society.

In addition to the development of land for employees a large area was developed to various stages and sold to the public; sales in this category amounted to 132 435 hectares.

# ADVANCES TO THE RURAL SECTOR GOVERNMENT ADVANCES

#### Advances Administered by State Bank

In addition to advances made under schemes mentioned above, the State Bank administers certain funds provided by the State for rural development.

Under the Advances to Settlers Act, 1930-1972, the Bank makes advances to settlers for a variety of purposes including general improvements, the purchase of livestock and the discharging of existing mortgages. The Loans to Producers Act, 1927-1962 empowers the bank to make advances for certain developmental projects and the purchase of certain capital equipment. The bank also administers Acts providing loans for the construction of vermin-proof fencing, general fencing and the laying of water piping.

# Dairy Adjustment Act, 1974

This Act, which replaces the Marginal Dairy Farms (Agreement) Act, 1971, gives effect to an Agreement between the South Australian and Australian Governments to overcome the problem of low incomes within the dairy industry, particularly in the case of producers relying on the sale of milk or cream for manufacturing purposes.

The scheme provides for farmers whose farms have insufficient potential to become viable economic units, while based on the sale of milk or cream for manufacturing purposes, to voluntarily sell their land to the State at market value. The State may then dispose of the land on the basis of the most profitable and economic land use, particularly with a view to building other rural properties to economic levels. The scheme also provides for interest free loans for the on-farm purchase and installation of refrigerated bulk milk vats and loans to dairy factories to facilitate the collection, storage and processing of refrigerated bulk milk.

At 30 June 1975, 158 applications had been received of which eighty-six were approved and twenty-two declined. Funds for the scheme are provided by the Australian Government when required. At 30 June 1975, \$287 188 had been expended on the purchase of dairy farms for approved applicants.

# Rural Industry Assistance (Special Provisions) Act, 1971-1972

This Act, which became operative on 27 May 1971 effects an agreement between the Australian and South Australian Governments for a scheme of assistance to help restore to a profitable basis those farms and farmers with a capability to service commitments and reach a stage of commercial viability within a reasonable time. The scheme provides for carry-on finance, debt reconstruction, farm build-up and rehabilitation loans.

Carry-on finance and debt reconstruction are designed to assist the farmer who, although having sound prospects on a long-term basis, has used all of his cash and credit resources and cannot meet his financial commitments. Advances for carry-on finance and/or debt reconstruction bear interest at the rate of not less than 4 per cent a year.

Farm build-up is to assist the process whereby farms which are too small to be profitable can be enlarged to an economic unit. Interest on advances is chargeable at a rate of not less than 6.25 per cent a year.

Funds were provided initially by the transfer of the balance of the Primary Producers Debt Adjustment Fund (\$804 636) to the Rural Industry Fund. Other contributions to the Fund are made by the Australian Government in accordance

with the Agreement and at 30 June 1975, \$15 400 000 had been received. The State is liable for the repayment to the Australian Government of 75 per cent of the moneys made available by the Australian Government for the purpose of the scheme together with interest at the rate of 6 per cent a year.

Total advances from the Fund by way of repayable loans to 30 June 1975 amounted to \$21,789,000.

Details of the number of applications received and the expenditure involved are shown in the following table.

# Rural Industry Assistance: South Australia, Applications, Approvals and Expenditures from Commencement of Operations to 30 June 1975 (a)

Debt recor	nstruction:					
	Applications received Applications declined Applications approved Total assistance approved Expenditure to 30 June 1975 Average assistance approved		••••••	•••••	5	)95
Farm buil	d-up:					
	Applications received Applications declined Applications approved Total assistance approved Expenditure to 30 June 1975 Average assistance approved				911 555 A	674
Rehabilita	tion:			٠.		
	Applications received/approved Total assistance approved Expenditure to 30 June 1975	· · · · · · · · · · · · · · · · · · ·		• • •	 \$17 5 \$17 6	

<sup>(</sup>a) Commenced 27 May 1971.

## Fruitgrowing Industry (Assistance) Act, 1972

The Fruitgrowing Industry (Assistance) Act effects an agreement between the Australian and South Australian Governments for a scheme of assistance to horticulturalists to remove redundant plantings of trees of the varieties used in the production of canning peaches, pears, apricots and fresh apples and pears. Growers are entitled to maximum levels of assistance of \$202 per hectare for canning fruits and \$142 per hectare for fresh fruits.

Assistance is provided initially in the form of a secured loan bearing interest at the rate of 6.25 per cent a year. The grower is obliged to enter into an undertaking that for the next five years he will not replant on the property from which the trees have been removed, any trees of the type specified. On compliance with the undertaking interest will be rebated, securities discharged and the loan converted into a grant.

#### Beef Industry Assistance Act, 1975

Arrangements between the Australian and South Australian Governments were concluded during 1974-75 for the provision of a scheme of assistance to specialist beef producers suffering liquidity problems.

Funds totalling \$3 million were allocated to the scheme comprising \$1.5 million from State funds and a matching dollar for dollar advance by the Australian Government.

The scheme provides for loans up to a maximum of \$10 000 for servicing essential carry-on requirements and interest at the rate of 4 per cent a year with repayment over a maximum period of 7 years. No repayment of principal would be required during the first year of operation. Interest for the corresponding period would be capitalised.

Seven applications for assistance were received to 30 June 1975.

# Primary Producers Emergency Assistance Act, 1967

The Primary Producers Emergency Assistance Act, 1967 provides a means of servicing the essential carry-on requirements of primary producers suffering loss as a result of drought, fire, flood, frost, animal or plant disease, insect pest or other natural calamity. Assistance is given to enable such persons to continue in the business of primary production where no other source of financial assistance is available to them and who by virtue of the assistance have a reasonable prospect of being able to continue in the business of primary production.

Payments and/or direct grants may also be made towards the cost of fodder or water for starving stock including the transport of livestock to and from agistment and for any other purpose deemed necessary.

The first 1.5 million expenditure in any calamity is to be borne from State funds.

Loans bear interest at the rate charged by the State Bank of South Australia in respect of overdraft loans made to primary producers at the time of making the advance.

Advances were made to the market gardeners at Virginia and surrounding districts in 1973-74 following losses sustained to glasshouses from hail damage.

During 1974-75, grants were made to two applicant pastoralists in the Far North of the State to assist in reinstating flood damaged housing and other improvements with grants for the airlift of mail and supplies to flooded regions and for the purchase and construction of portable holding yards for the trans-shipment of cattle from the flooded Coopers Creek area and surrounds.

Grants have also been made to primary producers on Kangaroo Island for agistment of stock, the purchase of fodder and freight concessions. This followed a fire which ravaged a large area of farming land on the island.

#### Financial Details

The following table gives details of total advances made to the rural sector by government authorities and balances outstanding at 30 June 1975.

## Advances to Settlers, South Australia

Particulars	Advances made during 1974-75	Total Advance at 30 June 1975	Outstan	ncipal ding at 30 e 1975	
	19/4-/3	1975	Persons	Amount	
Department of London	\$	S	Number	s	
Department of Lands: Advances to soldier settlers		10 143 560 5 461 033	161 131	151 778 123 091	
War) (a) Advances under Crown Lands Development Act Advances in drought affected areas	1 191 833 	41 336 119 985 623 822 282	573 44 47	7 942 117 555 648 80 775	
Advances under Marginal Dairy Farms Reconstruction Scheme (a)	133 743	287 188	32	264 450	
Scheme (a)	5 471 273	21 794 743	664	15 530 344	
Scheme (a). Advances to soldier settlers; Irrigation	83 758 —	155 619 2 096 348	122 51	155 619 65 852	
State Bank of South Australia: Advances to settlers for improvements (b) Advances under vermin and fencing Acts (c) Advances under loans to producers Acts	81 009 2 338 3 958 711	4 338 363 2 977 802 30 732 890	359 48 299	1 294 382 77 101 13 284 467	
Total	10 942 767	121 131 570	2 531	39 525 624	

- (a) Advances made from funds provided by the Australian Government.
- (b) Adjustment of cancelled and re-allotted holdings.
- (c) Vermin proof fencing and loans for fencing and water piping.

# PRIVATE INSTITUTIONAL ADVANCES

# Many financial institutions advance funds for rural development.

At July 1975 the major trading banks had advances outstanding to residents of South Australia employed in agriculture, dairying and grazing, of \$89.4 million. At June 1975 branches of major pastoral finance companies located in South Australia had \$68.0 million outstanding on similar advances.

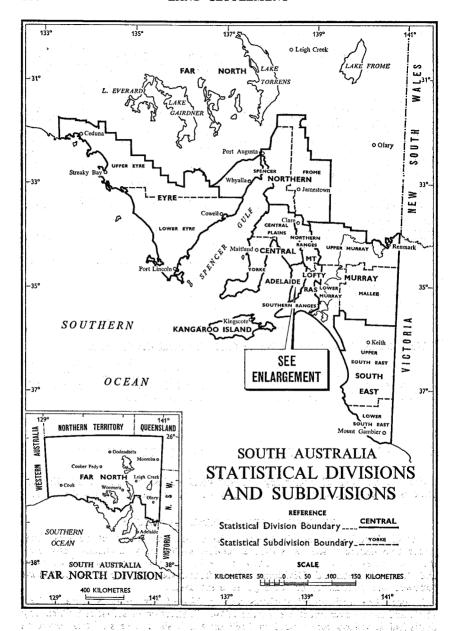
# 4.3 STATISTICAL DIVISIONS AND SUBDIVISIONS

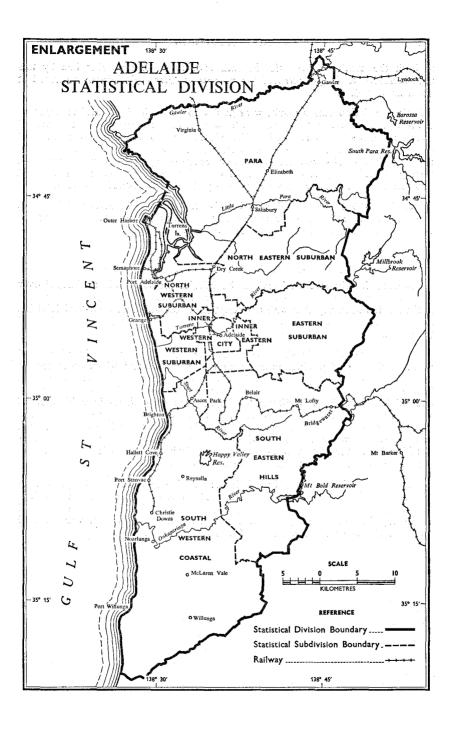
For the purpose of presenting the statistical series of South Australia, the State is divided into a number of areas which are entitled statistical divisions.

# PREVIOUS STATISTICAL DIVISIONS

Statistical series for South Australia have been published at various times under two different sets of statistical divisions—'Primary' Statistical Divisions, the boundaries of which have followed the boundaries of proclaimed counties, and 'Census' Statistical Divisions, where boundaries for the most part have followed the boundaries of local government areas.

Before 1889 agricultural statistics were published for counties from at least 1851, and local government areas from 1854. Publication of statistics by 'Primary' Statistical Divisions commenced in 1889 on the basis of five statistical divisions made up of thirty-eight counties. In 1920-21 an additional division was created





to limit the number of counties in each division (as the number had by this time increased to forty-eight) and the number of 'Primary' divisions remained at six from that date.

Early population census results were published on the basis of local government areas and counties, but for the 1891 and 1901 Censuses the five 'Primary' Statistical Divisions were used. The Census of 1911, which was the first conducted by the Australian Government, reverted to the use of counties for published results whereas subsequent censuses, up to and including 1947, were published using local government areas. Details of the 1954 and subsequent population censuses have been published by 'Census' Statistical Divisions.

For the 1966 Census an additional division, the Adelaide Statistical Division, was delineated to embrace the area expected to contain the urban development of Adelaide during a period of at least twenty years.

#### CURRENT DIVISIONS AND SUBDIVISIONS

Although, ideally, statistical division boundaries should remain unchanged over time so as to enable comparisons to be made of constant areas, growth in certain statistical divisions, together with the adoption of the Adelaide Statistical Division for the 1966 Population Census, made it desirable to review the boundaries and to select a new group of statistical divisions.

The new statistical divisions were designed to represent closely allied and meaningful areas of production and community interest and where areas smaller than divisions were considered to be important, subdivisions were introduced. Where practicable, entire local government areas are embraced in divisions and subdivisions. This facilitates the aggregation of statistics in a hierarchical structure rising from local government area to whole State through subdivision and division totals. Apart from major changes in relevant local government area boundaries, for which special provision will necessarily have to be made, it is considered that the statistical division and subdivision boundaries now adopted, should be suitable for a period of fifteen to twenty years.

These statistical divisions and subdivisions have been adopted for the publication of official statistics from 1 January 1971. Maps showing the statistical divisions and subdivisions are included on pages 114 and 115. A more detailed article together with descriptions of the divisions and subdivisions was included on pages 96-104 of the South Australian Year Book 1971.

PART 5

# **POPULATION**

# 5.1 THE CENSUS

# Early 'musters'

# PRE-FEDERATION ACTIVITY

Population returns in one form or another have existed from a very early period in the history of Australia. The earliest enumerations were known as 'musters', and although the actual results of very few of them have been preserved, it is probable that during the early days of colonisation they were of frequent occurrence. The first official 'muster' was taken in 1788 soon after the new settlement at Sydney Cove was formed, and in 1803 the first 'muster' of convicts in Van Diemen's Land (now Tasmania) was conducted.

# Development of the census

The first regular census in Australia was taken in New South Wales in November 1828, and included the population of Moreton Bay (now Queensland) but not Van Diemen's Land (Tasmania). Details of the names, ages and civil conditions of the inhabitants were sought. The next census was taken in 1833, and was followed by another in 1836, when arrangements were made for the enumeration of the population of the newly-established settlement at Port Phillip (Victoria). The first censuses taken in Tasmania, Victoria and Queensland as separate colonies were in 1841, 1854 and 1861 respectively. The first recognised census in South Australia was taken in 1844 and in Western Australia in 1848. The 1881 census was the first simultaneous census taken in Australia and formed part of the first simultaneous census of the British Empire.

#### CENSUSES OF AUSTRALIA

Under the Commonwealth of Australia Constitution Act of 1900, 'Census and Statistics' became Australian Government functions and with the passing of the empowering legislation, the Census and Statistics Act 1905, all censuses of Australia have been taken under the authority of this Act (now Census and Statistics Act 1905-1973) and the regulations made thereunder. The first Australian census collected under the Act was that of 1911; subsequent censuses were taken in the years 1921, 1933, 1947, 1954, 1961, 1966, 1971 and 1976, while the next census is planned for 1981. The Act provides that the census should be taken by means of a householder's schedule delivered to every dwelling and that this schedule should contain particulars of the dwelling and its inmates.

#### Periodicity and date of the census

The Census and Statistics Act 1905 provided that the Census should be taken 'in the year one thousand nine hundred and eleven and in every tenth year thereafter'. But in 1930 this was amended by the addition of the words 'or at such other time as is prescribed'. Because of the economic depression prevailing in 1931 the third Australian census was not taken until 1933, and because of war conditions the fourth Australian census was not taken until 1947. Consideration was then given to the practicability of holding future censuses in the series of years originally envisaged. However, it was considered that the interval of years from 1947 to 1951 was too short; therefore it was decided to take the fifth census in 1954 at the mid-point of the period from 1947 to 1961. The sixth census was held in 1961. Because of the administrative demand for more frequent counts of the population the seventh census was held in 1966, the eighth in 1971 and the ninth in 1976.

The Census and Statistics Act provides that 'the Census day shall be a day appointed for that purpose by proclamation', but the actual date is not specified. The census is conducted on a strictly de facto basis, i.e. it records the population actually in Australia at the place where located on census day (as distinct from a de jure basis, which records the population according to place of usual residence). In the selection of census day every endeavour is made to choose a date when there is a minimum displacement of population. In 1911 and 1921, census day was near the beginning of April, but in 1933 and subsequently, census day has been at the end of June because this time has fulfilled the condition mentioned and is otherwise suitable, being the end of a financial year and of a quarterly period used extensively for statistical purposes.

#### Scope of the census

The census covers the population and dwellings of Australia.

Persons excluded from results of Censuses up to 1966 were:

- (i) diplomatic representatives of other Governments and their families and staffs having diplomatic immunity in accordance with international practice;
- (ii) full-blood Aborigines, pursuant to Section 127 of the Constitution which specifically excluded them from the count of the population.

Diplomatic representatives, families and staffs are still excluded but, following the results of a referendum held in 1967, Section 127 of the Constitution was repealed and full-blood Aborigines were included in the 1971 Census and will be included in all future censuses. In 1971 Census publications, where 1966 figures

are also shown, these figures have been amended to include Aborigines and thus provide comparability: this can be done for all tables other than those on the labour force.

Broadly the principle is to record at the census babies born at or before midnight of census day and to exclude persons dying before midnight of census day. Travellers on ships in or between Australian ports at midnight of census day are also included.

For census purposes the Act defines a dwelling as 'a building, erection, or tenement, whether permanent or temporary, which is wholly or partly used for the purpose of human habitation and includes any ship or other vessel in any port of the Commonwealth or in any inland waters thereof, or any ship or vessel on a passage between any two Commonwealth ports.' Section 10 (2) provides that 'where a building is let, sub-let, or held in different apartments and occupied by different persons or families, each part so let, sub-let, or held and used for the purpose of human habitation shall be deemed a dwelling'. Measurable characteristics such as 'class' of dwelling, materials of outer walls, number of inmates in relation to number of rooms, facilities and rentals are recorded.

The census data on occupied dwellings are obtainable from the completed householder's schedules. However, census collectors are responsible for recording, from personal observations or inquiry, particulars also of dwellings which are unoccupied on census day, including those temporarily unoccupied or those used for 'holiday purposes'. Dwellings excluded from census results are those occupied by accredited persons having diplomatic immunity. Dwellings occupied solely by full-blood Aborigines also were excluded at censuses before 1971.

# Australian Parliamentary representation and the census

The Representation Act 1948-1973 obliges the Chief Electoral Officer to ascertain the number of people in Australia and in each of the States from time to time for the purpose of determining the number of Members of the House of Representatives to be chosen from each State, all 'Statistical Officers' being authorised and required to furnish all the information the Chief Electoral Officer needs for this purpose.

After each census the Chief Electoral Officer requests the Australian Statistician to supply the information required for the purposes of the Representation Act. From such information the Chief Electoral Officer prepares the requisite certificate and this is published in the Australian Government Gazette.

A more detailed description outlining the history, purposes, legal basis, organisation and publication of the results of the population census in Australia was included on pages 77-86 of the South Australian Year Book 1968.

### 5.2 POPULATION GROWTH AND DISTRIBUTION

The population of South Australia had reached 17 366 persons at the first Census on 26 February 1844. In 1861, twenty-five years after the first settlers arrived, the population was 126 830 and this figure had more than doubled by the Census in 1881. By 1921 the population was almost 500 000 persons and it is estimated to have reached 1 000 000 persons in January 1963. The population enumerated at the Census of 30 June 1966 was 1 094 984 persons and at the Census of 30 June 1971 it was 1 173 707 persons.

Population: South Australia, Censuses 1844 to 1971

		Population (a)			Average Annual Increa	
	Census Date -	Males	Females	Persons	s Number Per Ce	Per Cent
1844	26 February	9 686	7 680	17 366		
1846	26 February	12 670	9 720	22 390	2 5 1 2	14.47
1851	1 January	35 302	28 398	63 700	8 262	36-90
1855	31 March	43 720	42 101	85 821	5 530	8.68
1861	8 April	65 048	61 782	126 830	6 835	7.96
1866	26 March	85 334	78 118	163 45 <b>2</b>	7 324	5.78
1871	2 April	95 236	90 189	185 425	4 395	2.69
1876	26 March	109 841	102 687	212 528	5 421	2.92
1881	3 April	145 113	130 231	275 344	12 563	5.91
1891	5 April	161 920	153 292	315 212	3 987	1.45
1901	31 March	180 485	177 861	358 346	4 3 1 3	1.37
1911	3 April	207 358	201 200	408 558	5 021	1.40
1921	4 April	248 267	246 893	495 160	8 660	2.12
1933	30 June	290 962	289 987	580 949	7 149	1.44
1947	30 June	320 031	326 042	646 073	4 652	0.80
1954	30 June	403 903	393 191	<b>7</b> 97 094	21 574	3.34
1961	30 June	490 225	479 115	969 340	24 607	3.09
1966	30 June	550 196	544 788	1 094 984	24 507	2.53
1971	30 June	586 051	587 656	1 173 707	15 745	1.44

<sup>(</sup>a) Excludes full-blood Aborigines before 1966 Census.

Following the repeal in August 1967 of Section 127 of the Australian Constitution, official figures of population include full-blood Aborigines from 1966.

Reporting at the 1966 Census was insufficiently precise to enable a reliable dissection of full-blood and half-blood Aborigines to be made and consequently the difference between inclusive figures and exclusive figures of full-blood Aborigines should not be taken as a reliable measure of the Aboriginal population.

In the following table, increases in the population have been classified as recorded natural increase (the excess of recorded births over recorded deaths) and other increase (which consists mainly of the excess of arrivals over departures, either from overseas or interstate). Annual average increases which are given for each 10-year period since 1861 show some important aspects of the development of the State, namely:

- (i) the net migration, especially of males, away from South Australia following the mineral discoveries in other States in the 1880s and early 1890s;
- (ii) the slow growth during the economic depression of the 1930s when natural increase fell to a particularly low level; and
- (iii) the high rate of migration in the post 1939-45 War period up to 1960.

# Increases in the Population, South Australia (a)

Davia	Recor	ded Natural	Increase		Other Increa	ıse	Total Increase
Period	Males	Females	Persons	Males	Females	Persons	Persons
Annual Average: 1861-1870 1871-1880 1881-1890 1891-1900 1901-1910 1911-1920 1921-1930 1931-1940 (6		2 121 2 555 3 535 3 024 2 745 3 614 3 300 (b) 1 929		1 003 2 889 (—) 1 488 (—) 973 (—) 44 366 1 201 (—) 860		1 723 4 264 —) 2 629 —) 1 540 —) 448 1 292 1 915 [—) 1 257	5 896 9 185 4 255 4 316 4 962 8 414 8 346 2 459
1941-1950	5) 3 977 5 631 5 973 5 979	(b) 4 026 5 923 6 395	(b) 8 003 11 554 12 368	2 705 6 279 3 916	1 671 5 585 4 726 4 690	4 376 11 864 8 642 8 376	12 379 23 418 21 010 20 855
1971	6 487 5 822 4 973 4 761	6 823 6 258 5 599 5 184	13 310 12 080 10 572 9 945	824 (—) 1 389 2 107 9 716	1 131 355 ( 1 914 8 269	1 955 (—) 1 034 4 021 17 985	15 265 11 046 14 593 27 930

(a) Excludes full-blood Aborigines before 1966.

The State's rate of population increase was slower than the Australian rate in every decade from 1881-90 to 1931-40. In the next two decades the steep rise in the rate of net migration enabled an above-average growth rate to be achieved, and this was maintained until 1966. In the next eight years the State's growth rate was below the Australian rate but it exceeded the Australian rate in 1974.

Rate of Increase of Population, South Australia and Australia (a)

Period	So	outh Austra	lia		Australia	
Period	Recorded Natural Increase	Other Increase	Total Increase	Recorded Natural Increase	Other Increase	Total Increase
Annual Average:						
1861-1870	26.46	10.92	37.38	24.31	12.06	36.37
1871-1880	22.34	19.36	41.70	20.45	10.01	30.46
1881-1890	22.67	()8.66	14.01	19.96	14.23	34.19
1891-1900	16.90	( <del></del> )4·44	12.46	16.91	0.71	17.62
1901-1910	14.70	( <del></del> )1·22	13.48	15.29	1.00	16.29
1911-1920	15.99	2.90	18.89	15.77	4.20	19-97
1921-1930	11.87	3.53	15.40	12.97	5.23	18.20
	(b) $6.33$	()2·14	4.19	(b) 7.92	0.60	8.52
1941-1950		6.83	19.33	(b)12.04	4.34	16.38
1951-1960		14 18	27.99	13.71	8.73	22.44
1961-1970 (c).		8.09	19.66	11.78	5.75	17.53

(a) Rate per 1 000 of mean population.

(c) Excludes full-blood Aborigines before 1966.

<sup>(</sup>b) Deaths of defence personnel (except those registered on civil registers during 1940 and 1941) not deducted in calculating natural increase.

<sup>(</sup>b) Deaths of defence personnel (except those registered on civil registers during 1940 and 1941) not deducted in calculating natural increase.

Estimates of the population of the State for the last ten years are given in the following table. The total increase for each year and the rate of growth are also shown.

Estimated Population at 31 December, South Austr
--

	Year			Males	Females	Persons	Total Increase for Year	Rate of Growth
				 				Per Cent
1965				 542 600	537 300	1 079 900	30 796	2.94
1966				 554 000	549 800	1 103 700	20 684	1.92
1967				 559 300	556 700	1 115 900	12 186	1.10
1968				 566 700	565 400	1 132 100	16 211	1.45
1969		• •		 574 700	574 700	1 149 400	17 238	1.52
1970				 584 400	585 900	1 170 200	20 855	1.81
1971				 591 700	593 800	1 185 500	15 265	1.30
1972				 596 100	600 400	1 196 500	11 046	0.93
1973				 603 200	608 000	1 211 100	14 593	1.22
1974				 617 700	621 400	1 239 100	27 930	2.31

<sup>(</sup>a) Excludes full-blood Aborigines before 30 June 1966.

Intercensal estimates of population are derived by adding to the population ascertained at the Census the recorded natural increase and the allocation to the State of portion of the net gain to Australia by overseas migration; gains and corresponding losses that result from movement between South Australia and other States are also taken into account, in so far as they are recorded as transfers of residence under child endowment procedures or Australian Government electoral procedures, supplemented by results of any special count or sample survey. Estimates before 1971 have been revised according to Census results.

The estimates show that an annual increase in population of over 20 000 persons occurred during the years 1965 and 1966 but generally fluctuated below that level in the period 1967 to 1973. In 1974 the annual increase was 27 930.

The rate of growth of the population, *i.e.*, the increase during the period expressed as a percentage of the population at the beginning of the period, fluctuated widely before 1921 then settled at about 2 per cent a year. From 1928 to 1940 the rate was less than 1 per cent but from 1947 to 1961 it was above 2 per cent with some years in the 1950s exceeding 3 per cent. In the eight years to 1973 the rate was below 2 per cent, but increased to 2·31 per cent in 1974.

The estimated mean population for South Australia is calculated for the years ended 30 June and 31 December. Estimates for the last 10 years are shown in the next table.

# Estimated Mean Population, South Australia (a)

Year -		Yea	r Ended 30	June	Year Ended 31 December			
		Males	Females	Persons	Males	Females	Persons	
1966 1967		542 300 553 800	536 600 549 300	1 078 900 1 103 100	549 800 556 800	544 500 553 100	1 094 400 1 110 000	
1968 1969		559 400 566 500	556 300 564 800	1 115 700 1 131 400	562 600 570 500	560 200 569 500	1 122 800	
1970 1971	• • • • •	574 800 583 500	574 300 584 600	1 149 100 1 168 100	579 200 587 400	579 500 589 100	1 158 600 1 176 500	
1972 1973 1974	•••••	590 900 596 000 603 400	592 900 599 600 607 500	1 183 700 1 195 600 1 210 800	593 400 599 200 (b)608 700	596 000 603 400 (b)612 000	1 189 400 1 202 600 (b)1 220 700	
1975		613 700	616 800	1 230 500	(0)008 700	(0)012 000	(0)1 220 700	

<sup>(</sup>a) Mean population figures for periods before 30 June 1966 are based on estimates exclusive of full-blood Aborigines.

#### EARLY HISTORY OF SETTLEMENT

A detailed description of early settlement in South Australia together with information on the 1851 Census was included on pages 116-7 of the South Australian Year Book 1970.

### DISTRIBUTION OF POPULATION

For the purpose of presenting population and dwelling statistics urban centres are delimited by methods first adopted at the Census of June 1966 and applied uniformly throughout Australia.

At each Census of Population and Housing a boundary is drawn around each population cluster of 1000 or more persons (or around known holiday resorts of less population if they contain 250 or more dwellings of which at least 100 are occupied). These clusters are named urban centres and the population and dwellings enumerated therein are classified as urban for statistical purposes.

In delimiting urban centres with 25 000 or more population the basic criterion used is population density. The geographic units classified according to the density criterion are collector's districts, the smallest units available. These areas vary in size and shape, but as far as possible they have been designed to ensure that significant urban development in large rural collector's district is split off as a separate collector's district. Particular rules apply to contiguous areas with special functions, such as airports, sporting areas and industrial areas, which do not meet the density criterion. A gap in urban development which is less than three kilometres (by the shortest rail or road distance) between the edge of one area of urban development and another is ignored and the urban

<sup>(</sup>b) Adjusted to include former Darwin residents living in this State following the effects of Cyclone Tracy.

areas are treated as contiguous; two urban areas separated by a gap of three or more kilometres are treated as separate urban areas even if the gap comprises mainly reserved land or a natural barrier.

The boundary of such an urban centre is, therefore, the peripheral boundary of an aggregate of contiguous urban collector's districts, the densities of which are at least 200 persons per square kilometre. The boundary is a moving one which reflects the process of urbanisation. The use of objective criteria enables valid comparisons to be made between one urban centre and another, and between the population for an urban centre at one census with the population at succeeding censuses.

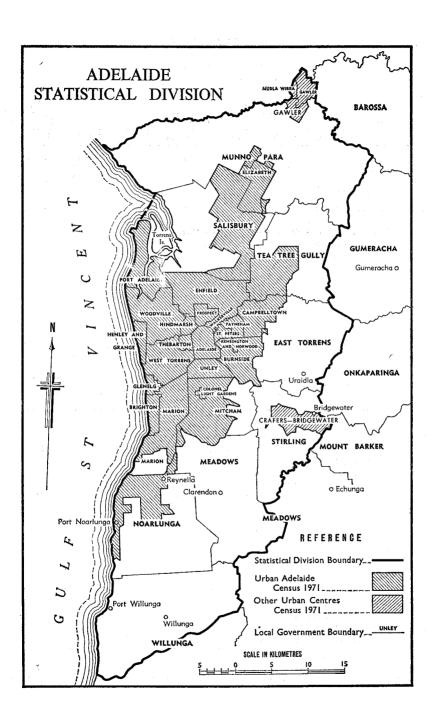
When delimiting urban centres of less than 25 000 population the urban centres are delimited subjectively (by the inspection of aerial photographs, by field inspection and/or by consideration of any other information that is available). All continuous urban growth is included, together with close but non-contiguous development which could be clearly regarded as part of the centre.

Around Adelaide (and all other urban centres with a population of at least 100 000) two boundaries have been defined. The outer one, which is fixed, circumscribes the area in close economic and social contact with the main city, and which contains the anticipated urban development of the city for a period of at least twenty to thirty years. This boundary defines the Adelaide Statistical Division (see map on page 125). The inner boundary indicates the area which, at the time of each census, meets the criteria for urban areas described above. As urbanisation proceeds, this boundary will move outwards to encompass peripheral development. This boundary defines Urban Adelaide.

At the 1966 Census, Urban Adelaide contained nearly all the metropolitan areas as defined at the 1961 Census, and, in addition, included the City of Elizabeth and large portions of the Cities of Salisbury and Tea Tree Gully, and small parts of Munno Para and East Torrens District Councils. Results of the 1971 Census indicate that Urban Adelaide has extended to encompass the whole of the urban area of Reynella-Port Noarlunga and fringe development particularly in northern suburbs (see map on page 125). The area of Urban Adelaide at 30 June 1971 was 554·9 square kilometres.

At the 1971 Census 809 482 persons (68.97 per cent of the State population) lived in Urban Adelaide, and a further 183 187 (15.61 per cent) were in other urban areas; this is a continuance of the trend of increased urbanisation in South Australia.

In 1921 the rural population was 195 054 and at that time represented 39.4 per cent of the total population (42.1 per cent of males and 36.7 per cent of females). There were 214 762 persons classified as living in rural areas at the 1933 Census but the total had fallen slightly to 200 065 in 1961, and the proportion of the total population was down to 20.6 per cent (21.7 per cent of males and 19.6 per cent of females). Further falls occurred during 1961-66 and 1966-71. The total rural population was 190 167 persons at 30 June 1966, and the proportion of the total population had fallen further to 17.4 per cent. Figures for the 1971 Census again show a decline in the rural population to 15.3 per cent (16.1 per cent of males and 14.4 per cent of females).



# Urban and Rural Population, South Australia (a) Censuses 1921 to 1971

		Ur	ban	_	urai	Total		
Census	Adela	ide (b)	Oth	er (c)	· K	(including Migratory)		
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	
1921	255 375 312 619 382 454 483 508 587 957 b)728 279 809 482	51·57 53·81 59·20 60·66 60·66 66·51 68·97	41 637 51 456 65 911 110 107 177 380 174 964 183 187	8·41 8·86 10·20 13·82 18·30 15·98 15·61	195 054 214 762 196 007 201 133 200 065 190 167 179 148	39·39 36·97 30·34 25·23 20·64 17·37 15·26	495 160 580 949 646 073 797 094 969 340 1 094 984 1 173 707	

- (a) Excludes full-blood Aborigines before the 1966 Census.
- (b) See text for definition of Urban Adelaide.
- (c) 'Other Urban' up to the 1947 Census comprised all municipalities outside Urban Adelaide. For the 1954 and 1961 Censuses non-municipal towns of 1 000 or more persons were also included, but in 1961 municipalities of less than 1 000 persons were excluded. The 1966 and 1971 figures comprised clusters of 1 000 or more persons; included also were four centres, namely Goolwa, Port Elliot, Port Broughton and Port MacDonnell which, although having a population of less than 1 000, were regarded as urban on a dwelling density basis.

# Population by 1966 Residence: South Australia, Census 30 June 1971(a)

		1971	Residence	(South Aus	tralia)	
1966 Residence		Urban			Rural	
	Males	Females	Persons	Males	Females	Persons
Same address in 1966 as in 1971  Moved from 1966 residence in: South Australia:	245 742	256 398	502 140	53 066	47 593	100 659
Urban	110 075	115 359	225 434	10 949	10 946	21 895
	13 213	14 154	27 367	10 472	9 444	19 916
Urban	4 87 <b>7</b>	4 911	9 788	567	504	1 071
	478	480	958	202	139	341
Urban	5 211	5 207	10 418	761	649	1 410
	799	769	1 568	300	241	541
Urban	1 544	1 544	3 088	222	183	405
	268	233	501	98	56	154
Urban	1 236	1 158	2 394	154	130	284
	256	218	474	121	97	218
Urban	602	610	1 212	32	29	61
	103	120	223	30	18	48
Urban	803	703	1 506	123	93	216
	128	111	239	45	35	80
Urban	350 19 33 856	325 15 33 072	675 34 66 928	27 1 468	19 1 335	46 2 803
Total	6 481	6 439	12 920	1 428	1 141	2 569
	426 041	441 826	867 867	80 065	72 652	152 717

<sup>(</sup>a) Excludes persons aged under 5 years and persons who were not usual residents of the dwelling in which they were enumerated.

The second table on page 126 shows the population of South Australia at the 1971 Census by their 1966 residence. At the 1971 Census there were 992 669 persons in urban areas of South Australia. Excluding non-usual residents and persons under 5, 57.86 per cent of the urban population were at the same address in 1966 (i.e. 502 140 out of 867 867). There were also 179 148 persons in rursal areas of South Australia. Again excluding non-usual residents and persons under 5, 65.91 per cent of the rural population were at the same address in 1966 (i.e. 100 659 out of 152 717).

For statistical purposes the State is divided into nine statistical divisions, most of which are further divided into subdivisions, as described on page 116. The population of each division and subdivision at the 1966 and the 1971 Censuses, and estimates for subsequent years are shown in the following table.

Population of Statistical Divisions and Subdivisions, South Australia

Statistical Division and Subdivision —	Census :	30 June	Estimate	30 June
Statistical Division and Subdivision —	1966	1971	1973	1974
delaide:				
City	18 619	16 313	15 000	14 700
Inner Western	25 992	24 351	23 000	22 100
Inner Eastern	100 939 91 544	99 171 117 640	98 000 130 500	97 200 137 600
Eastern Suburban	81 779	89 681	91 000	92 000
South Eastern Hills	62 017	67 793	70 000	71 30
South Western Coastal	107 274	124 673	133 900	140 40
Western Suburban	72 820	79 248	79 600	79 70
North Western Suburban	135 927	132 403	130 900	131 100
Para	74 684	91 420	96 100	99 30
Total Adelaide	771 595	842 693	868 000	885 400
entral:				
Central Plains	21 569	20 464	20 200	20 25
Yorke	11 728	10 731	10 600	10 65
Total Central	33 297	31 195	30 800	30 90
angaroo Island	3 375	3 156	3 150	3 10
fount Lofty Ranges: Northern Ranges	21 852	21 447	21 350	21 50
Southern Ranges	30 561	30 384	31 250	32 200
Total Mount Lofty Ranges	52 413	51 831	52 600	53 700
furray:				
Upper Murray	31 802	31 359	31 150	31 300
Mallee	17 984 7 597	18 839 6 756	19 050 6 500	19 25 6 30
Mallee	1 391	0 /30	6 300	0 30
Total Murray	57 383	56 954	56 700	56 85
outh East:				
Upper South East	20 724	20 691	20 350	20 40
Lower South East	36 880	37 290	37 250	37 60
Total South East	57 604	57 981	57 600	58 00
yre:	0.100	0.000	0.050	
Upper Eyre	8 180	9 009	8 950	8 95
Lower Eyre	20 820	20 802	20 650	20 75
Total Eyre	29 000	29 811	29 600	29 70

# Population of Statistical Divisions and Subdivisions, South Australia (continued)

Castistical Division and Cut division	Census	30 June	Estimate 30 June		
Statistical Division and Subdivision	1966	1971	1973	1974	
Northern: Spencer		72 499 11 720	74 050 11 150	74 250 11 000	
Total Northern	74 553	84 219	85 200	85 250	
Far North	14 190 1 574	13 977 1 890	13 400 2 050	13 300 2 000	
Total State	1 094 984	1 173 707	1 199 100	1 218 200	

<sup>(</sup>a) Persons on ships in port and travelling on long-distance public transport.

# Population in and near Adelaide

Urban Adelaide as defined for the 1971 Census comprises 20 complete local government areas and part of each of seven others. Of these, 19 have been proclaimed as cities, the latest being Henley and Grange which was officially declared to be a city from 11 June 1970.

Qualification for city status within the metropolitan local government areas (as defined in the Local Government Act) is dependent on the population reaching 15 000 persons, but a subsequent fall in population below this level (as has occurred in the City of Kensington and Norwood) does not bring loss of city status.

Over the last two decades there has been a considerable fall in the population of the City of Adelaide, and lesser falls in all of the older municipalities close to the city, namely Prospect, Hindmarsh, Thebarton, Unley, Kensington and Norwood and St Peters. The greatest proportionate increases in population have occurred in the local government areas of Munno Para, Salisbury, Elizabeth, Enfield (generally north of the city); Campbelltown and Tea Tree Gully (northeast); Marion, Brighton and Noarlunga (south-west).

Although figures for Urban Adelaide, defined according to the density criteria, are not available for the 1947 and 1954 Censuses, there appears to have been a continual increase in the proportion of the total State population residing in Urban Adelaide. At the 1961 Census, the population of Urban Adelaide defined according to the density criteria is estimated to have been 580 449 persons or 59.9 per cent of the total State population and this figure had increased to 728 279 (66 per cent) at the Census, 30 June 1966.

After the 1966 Census the gap in development between Urban Adelaide and Urban Reynella-Port Noarlunga so narrowed as to enable these two areas to be regarded as contiguous at the 1971 Census. This amalgamation, together with the inclusion of further peripheral development, has resulted in an increase to 809 482 persons (69 per cent of the State population).

In addition to Urban Adelaide there are two urban centres within the Adelaide Statistical Division, Urban Gawler with a population of 6 959 persons at the 1971 Census and Urban Crafers-Bridgewater with a population of 5 308 persons.

# Population at 30 June, Adelaide Statistical Division(a)

		Census		Estimate
Local Government Area	1961	1966	1971	1974
Adelaide (C)	23 051	18 619	16 313	14 700
Brighton (C)	20 337	22 638	22 583	22 100
Burnside (C)	36 266	38 776	39 339	38 900
Campbelltown (C)	20 945	32 083	37 942	39 900
Colonel Light Gardens (M)	3 671	3 404	3 369	3 100
East Torrens (DC)	3 664	3 822	4 202	4 700
Elizabeth (C)	(b)	32 956	33 389	33 800
Enfield (C)	72 427		(c) 77 435	76 300
Gawler (M)	5 639	5 703	5 495	5 700
	14 492	14 763	15 237	15 400
Gleneig (C)	11 680	14 146	16 128	16 900
Hindmarsh (M)	12 914	11 367	10 306	9 300
Kensington and Norwood (C).	13 476	11 943	11 081	10 600
Marion (C)	58 464	66 984	67 572	67 800
	2 242	2 824	5 128	9 500
Meadows (DC) (part)	43 122	49 485	54 377	56 300
Mitcham (C)	111	155	186	200
Munno Poro (DC)	3 154	14 279	20 179	20 300
Munno Para (DC) Noarlunga (DC)	5 492	14 214	28 464	40 400
	14 930	16 847	17 543	17 700
Payneham (C)	38 923	39 846	38 968	37 200
Port Adelaide (C)	22 184	21 415	20 934	20 300
Prospect (C)	35 715	35 766	56 279	70 100
	7 075	7 552	8 359	9 500
Stirling (DC)	11 727	11 339	10 675	10 100
Too Troe Culty (C)	5 887	21 315	36 708	50 600
Tea Tree Gully (C)	12 884	12 303	11 831	10 900
Unlaw (C)	40 280	39 735	39 928	39 700
Unley (C)	40 280	4 593	(c) 7 208	7 300
Walkerville (M)	4 464	4 593	(c) / 208 50 097	49 300
West Torrens (C)	2 210	2 190	2 614	
Willunga (DC) (part)				3 000
Woodville (C)	71 039	73 930	72 806	73 800
Not incorporated	<del></del>		(d) 18	
Total	659 146	771 561	842 693	885 400

<sup>(</sup>a) Excludes full-blood Aborigines before 30 June 1966. (b) Elizabeth (C) was constituted out of Salisbury (C) in July 1964. (c) Comparisons with previous censuses is affected by transfer in July 1970 of the Suburb of Vale Park (approximately 2 200 persons) from Enfield (C) to Walkerville (M). (d) Torrens and Garden Islands included in Adelaide Statistical Division subsequent to 1966 Census.

# Population Beyond the Adelaide Statistical Division

Only a very small proportion (15.6 per cent) of South Australia's population is located in urban centres outside of the capital city compared with the three eastern States, New South Wales, Victoria and Queensland. Whereas, in each of

<sup>(</sup>C) Municipality with city status (M) Municipality (DC) District Council

the eastern States, there are at least four centres outside the capital city with a population in excess of 20 000, Whyalla with a population of 32 109 at the Census of 30 June 1971 is the only such centre in South Australia.

The following table illustrates the change in the population of urban centres outside the Adelaide Statistical Division between 1966 and 1971.

Population of Urban Centres: South Australia, Censuses 1966 and 1971(a)

•••	Cen	sus		Census		
Urban Centre	June 1966 June 197		Urban Centre	June 1966	June 1971	
Angaston	1 887	1 813	Mount Barker .	. 1 934	2 475	
Balaklava		1 114	Mount Gambier	. 17 261	17 934	
Barmera	1 490	1 687	Murray Bridge .	. 6 444	7 441	
Berri	2 232	2 713	Naracoorte	. 4 380	4 429	
Bordertown	1 759	1 979	Nuriootpa	. 2 041	2 468	
Burra	1 342	1 276	Penola	. 1 383	1 293	
Ceduna	1 457	2 070	Peterborough	. 3 117	3 023	
Clare	1 582	2 099	Port Augusta	. 10 457	12 224	
Coober Pedy	<b>(b)</b>	1 394	Port Broughton	418	488	
Crystal Brook	1 235	1 181	Port Elliot	. 565	566	
Goolwa	561	681	Port Lincoln	. 8912	9 158	
Jamestown	1 392	1 331	Port MacDonnell	. 531	585	
Kadina	3 022	2 828	Port Pirie	. 15 567	15 456	
Kapunda	1 119	1 261	Quorn	(b) 900	1 008	
Keith	1 097	1 212	Renmark		3 278	
Kingscote	1 071	1 011	Strathalbyn	. 1 449	1 535	
Kingston (SE)	1 065	1 173	Tailem Bend		1 982	
Lobethal	1 098	1 37 <b>7</b>	Tanunda	. 1986	1 939	
Loxton	2 420	2 663	Victor Harbor .	. 3 142	3 527	
Maitland	1 017	1 020	Waikerie	(b) 989	1 252	
Mannum	0.024	2 043	Wallaroo	. 2 113	2 097	
Millicent	4 539	5 075	Whyalla	. 22 131	32 109	
Moonta	1 702	1 570	Woomera- Maralinga	. 4749	4 082	

<sup>(</sup>a) Outside Adelaide Statistical Division. For definition of 'urban' see page 123.

Since 1966 population growth has been particularly evident in Whyalla, the centre for steel-making and ship-building; Port Augusta situated at the head of Spencer Gulf; towns in the Lower South East; and urban centres situated in the Upper Murray. The growth of urban centres in the Upper Murray has been

<sup>(</sup>b) Non-urban in 1966. Where an urban centre at the 1971 Census was non-urban at the 1966 Census, figures for both Censuses (where available) have been shown for comparison.

encouraged by the increased availability of irrigated land and the expansion of secondary industry associated with the area's primary production.

Outside the Adelaide Statistical Division there are only five municipalities which have been proclaimed as cities, namely Whyalla, Mount Gambier, Port Pirie, Port Augusta and Port Lincoln. The following table shows the growth since the 1947 Census, of these and other municipalities with a population of about 3 000 or more. Differences in population between the municipality and the corresponding urban centre shown in the previous table are attributable to the growth of the urban centre outside the municipality area in Mount Gambier, Murray Bridge, Port Pirie and Whyalla. The Municipality of Renmark contains a considerable rural area and the population in the rural area is not included in the population for the urban centre.

Population of Municipalities at 30 June. South Australia(a)

	Census						
Municipality 1947	1954	1961	1966	1971	Estimate 1974		
Mount Gambier 6 771	10 331	15 388	17 261	17 386	17 600		
Murray Bridge 3 690	4 362	5 404	5 958	6 709	7 150		
Naracoorte 2 202	3 329	4 4 1 0	4 380	4 429	4 450		
Peterborough 2 890	3 437	3 430	3 117	3 023	2 900		
Port Augusta 4 351	6 704	9 711	10 132	12 224	12 950		
Port Lincoln 3 972	5 871	7 508	8 912	9 158	9 350		
Port Pirie 12 019	14 223	14 003	13 965	13 227	12 550		
Renmark 4 832	5 484	6 070	6 275	6 333	6 350		
Whyalla 7 845	8 598	13 711	21 281	31 570	33 500		

<sup>(</sup>a) Excludes full-blood Aborigines before 30 June 1966.

# 5.3 BIRTHS AND DEATHS

Compulsory registration of births and deaths was first provided in South Australia in 1842 when an Act 'for registering births, deaths and marriages in the Province of South Australia' was passed. Current legislation is contained in the Births, Deaths and Marriages Registration Act, 1966-1975 which came into operation on 1 January 1968 and the administration of the Act is the responsibility of the Principal Registrar of Births, Deaths and Marriages. For registration purposes the State is divided into twenty-two registration districts each of which has a registry office in the charge of a District Registrar.

The Principal Registrar maintains a register of all live births and of all deaths registered in the State and each District Registrar maintains, in a register, duplicate copies of the registrations of births and deaths which occurred in the district under his jurisdiction. Up to the end of 1967 separate registers were

kept of still births, which were not included in the registration or statistics of either live births or of deaths. Compulsory registration of still births was introduced in South Australia in 1937.

The current legislation does not require the Principal Registrar to maintain a register of still births, but it provides for a 'Medical Certificate of Cause of Perinatal Death' to be filled in and forwarded to the Principal Registrar by the attending medical practitioner in respect of a 'child not born alive of at least twenty weeks gestation or four hundred grams weight'. The 'perinatal' certificates are also required from attending medical practitioners for children dying within twenty-eight days of birth.

The birth of each live-born child is required to be registered by a parent within sixty days of the date of birth. Registration of a live birth after the expiration of sixty days following the date of birth requires also the payment of a fee and a declaration in a form prescribed by the Act.

A death is required to be registered within fourteen days of the date of death by the occupier of the building or place in which the death occurred. Special provisions and penalties exist for the late registration of a death. A body may not be buried unless the undertaker is in possession of a 'Notice of signing of Medical Certificate of Cause of Death' signed by a medical practitioner or of an order by a coroner for burial, and the undertaker is required within seven days of the disposal of the body to notify the Principal Registrar of such disposal.

Births and deaths of Aborigines when registered are incorporated in registers, but to the end of 1965 were excluded from statistics where there was definite indication that they were of full-blood. Statistics of births and deaths for 1966 and subsequent years cover all registrations.

In accordance with international practice, statistics for a period are on the basis of the births and deaths which were registered during that period. However, numbers registered in a period usually differ from the number of occurrences in the same period and, mainly because of the longer period allowed for registration, such variations generally are more apparent in birth than in death figures.

#### BIRTHS

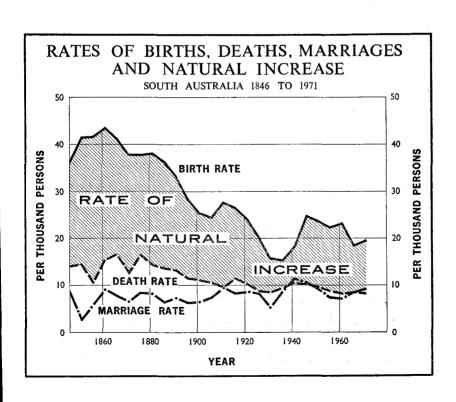
The South Australian birth rate per thousand of mean population during 1974 was 16.52 compared with the Australian rate of 18.33 per thousand. This was also the lowest rate recorded by any of the Australian States or Territories for the same period. Although there has been no lower post-war rate recorded, there was a period from 1931 to 1940 inclusive when the rate remained below this 1974 level and the lowest ever recorded rate of 14.14 was established in 1935. Fluctuations in the rate over time can be seen in the Statistical Summary, Appendix A.

The difference between births which actually occurred and those registered during the five years to 1974 is shown in the following table. The masculinity rate, i.e., the number of male births per hundred female births, is also shown.

# Live Births Occurred and Registered, South Australia

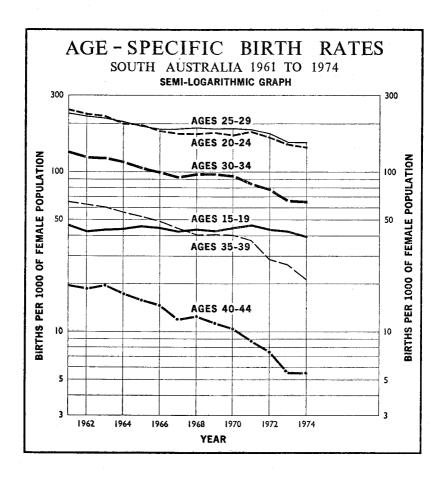
	Total Van Dinth							
	Year	Live Births – Occurred (a)	Total	Rate (b)	Males	Females	Mascu- linity (c)	
1970		22 605	22 617	19.52	11 555	11 062	104-46	
1971		22 756	22 996	19.55	11 797	11 199	105-34	
1972		21 776	21 844	18-37	11 299	10 545	107-15	
1973		20 159	20 407	16.97	10 475	9 932	105-47	
1974		<b>19</b> 199	20 181	16.52	10 489	9 692	108-22	

- (a) Figures are subject to the addition of late registrations, particularly to 1974.
- (b) Number per 1 000 of mean population.
- (c) Number of male births per 100 female births.



# Age-specific Birth Rates

One significant feature of age-specific birth rates as shown in the table on page 135 is that whereas in 1961, females in the 20-24 years age group accounted for the highest number of births this can now be attributed to those in the 25-29 years age group. Also, a general decline in the fertility of women of all ages is evident, and this is particularly marked in the older age groups. In accordance with this, total fertility which represents the hypothetical number of children that a woman will bear during her lifetime has also decreased reflecting the tendency for couples to have smaller families.



# Age-specific Birth Rates and Total Fertility, South Australia (a)

Year	Age Group (Years)										
rear	15-19	20-24	25-29	30-34	35-39	40-44	45-49	- Total Fertility			
			Aı	nnual Rat	es						
1947(b) .	. 30.30	174.83	202.30	136.20	77.07	22.57	1.62	3.22			
1954(b) .	. 41.85	212.75	206.60	123.19	65.83	26.76	0.84	3.39			
1961(b) .	. 46.66	246.12	235.33	135.45	65.04	19.54	1.48	3.75			
1966(b) .	. 44.56	178.73	181.58	99.31	49.30	14.62	0.75	2.84			
1971(b) .	. 46.40	178.03	184.68	84.26	37.45	8.72	0.52	2.70			
1972	. 43.79	164.26	174.82	78.12	28.60	7.53	0.52	2.49			
1973	. 42.67	149.50	155.20	66.05	26.46	5.45	0.58	2.23			
1974	. 39.72	142.17	152.17	65.70	21.12	5.51	0.22	2.13			

<sup>(</sup>a) Number of live births per 1 000 of female population in each age group. Excludes particulars of full-blood Aborigines before 1966.

# Gross and Net Reproduction Rates

The gross reproduction rate is an indication of the number of live females that can be expected to be born to a woman through her child-bearing period. The net reproduction rate, which is a measure of the degree to which the population can replace itself, is derived from the gross reproduction rate by taking into account the females who fail to survive to the end of their child-bearing period. The following table indicates that the net reproduction rate has been steadily decreasing, reaching a level of 1.017 in 1974. This level is approaching the point at which women produce only one female child to take their place in the reproductive cycle and, excluding the impact of migration, if this trend continues, zero population growth will ultimately be reached. It should be realised, however, that these figures are not a forecast of what can be anticipated but only a hypothetical projection of what will happen if the given conditions upon which they have been based continue to apply.

# Gross and Net Reproduction Rates, South Australia (a)

		<b>.</b>					C====	Net I	Reproduction Rate
		Yea	ır				Gross - Reproduction Rate	Rate	Mortality Experience on which Rate is Based
1961(b)	 			• • •	•••	 	1.841	1.781	1960 to 1962
1966(b)	 					 	1.368	1.323	)
1967	 					 	1.342	1.304	1
1968	 					 	1.337	1.296	1
1969	 					 	1.351	1.310	≻ 1965 to 1967
1970						 	1.346	1.305	
1971(b)	 					 	1.314	1.274	1
1972	 					 	1.098	1.065	ļ
1973	 					 	1.086	1.060	
1974	 					 	1.049	1.017	ļ

<sup>(</sup>a) Excludes particulars of full-blood Aborigines before 1966. (b) Census year.

<sup>(</sup>b) Census year.

# Ex-nuptial Births and Legitimations

Since 1960 there has been a marked increase in the number and rate of exnuptial births. For the previous forty years, the rate remained relatively steady at about three per hundred live births, but in recent years the rate has increased sharply, reaching a record level of 9.31 per hundred live births in 1974.

The legitimation of an ex-nuptial child upon the subsequent marriage of the parents which was first provided for in South Australia by the Legitimation Act, 1898, the provisions of which were later incorporated in the Births and Deaths Registration Act, was possible only if there was no legal impediment to the marriage of the parents at the time of the birth of the child. The Marriage Act 1961-1975, which came into operation on 1 September 1963, provides for the legitimation of a child upon the subsequent marriage of the parents whether or not there was a legal impediment to the marriage at the time of the birth of the child. Legitimations under this Act take place whether or not the child was living at the time of marriage, and the child is considered legitimate from the date of birth or, in the case of a child born before 1 September 1963, at that date.

Ex-nuptial Live Births and Legitimations, South Australia

	Year —		Y anisimansi			
	rear —	Males	Females	Total	Rate per 100 Live Births	- Legitimations
	100	-				
1970		- 886	829	1 715	7.58	323
1971		898	884	1 782	7.75	337
1972		931	872	1 803	8.25	296
1973		921	879	1 800	8.82	280
1974		988	891	1 879	9.31	305

#### Confinements and Live Births

In the table below confinements in each of the years 1971 to 1974 have been shown in relation to age group of the mother and nuptiality.

Confinements: Age Group of Mother and Nuptiality, South Australia

A Ø	Numl	ber of Con	finements (	a)	Percent	age of Tota	l in each (	Category
Age Group —	1971	1972	1973	1974	1971	1972	1973	1974
		-	NUPTI	AL CON	IFINEM	ENTS		
10-14 15-19 10-24 15-29 10-34 10-34 10-34 15-39 10-44 15 and over Not stated	1 1 711 8 135 6 958 2 756 1 124 289 19	1 1 602 7 408 7 132 2 591 877 230 19	1 502 6 923 6 766 2 240 808 173 21	1 419 6 635 6 927 2 313 652 167	0·0 8·1 38·7 33·1 13·1 5·4 1·4	0·0 8·1 37·3 35·9 13·0 4·4 1·2 0·1	8·1 37·6 36·7 12·2 4·4 0·9 0·1 0·0	7·9 36·6 38·2 12·8 3·6 0·9 0·0
Total	20 993	19 860	18 434	18 119	100.0	100-0	100.0	100-0

# Confinements: Age Group of Mother and Nuptiality, South Australia (continued)

A C	Numbe	r of Conf	inements	(a)	Percenta	ge of Tota	al in each	Category
Age Group -	1971	1972	1973	1974	1971	1972	1973	1974
			EX-NUF	TIAL CO	ONFINE	MENTS		
10-14 15-19 20-24 25-29 30-34 35-39 40-44 45 and over Not stated	11 749 598 232 109 55 15	9 760 573 273 110 40 26	14 813 520 239 129 55 11	14 798 557 300 120 53 16 2	0·6 42·3 33·8 13·1 6·2 3·1 0·8 0·1 0·1	0·5 42·4 32·0 15·2 6·1 2·2 1·4	0·8 45·6 29·2 13·4 7·2 3·1 0·6 0·1	0·8 42·8 29·9 16·1 6·4 2·8 0·9 0·1 0·2
Total	1 771	1 791	1 783	1 863	100-0	100-0	100-0	100-0

<sup>(</sup>a) Includes only those confinements which resulted in one or more live births.

The next table shows the number of confinements and live births for 1973 and 1974 classified separately for single births and multiple births in which at least one issue was live-born.

#### Confinements and Live Births: Class of Birth, South Australia

		19	73		1974				
Particulars	Confine-		Live Births		Confine-	Live Births			
	ments (a)	Male	Female	Total	ments (a)	Male	Female	Total	
Nuptial: Single births Twins Triplets Quadruplets	18 261 171 2	9 374 174 6	8 887 166 —	18 261 340 6	17 940 176 2 1	9 294 202 2 3	8 646 150 4 1	17 940 352 6 4	
Total nuptial	18 434	9 554	9 053	18 607	18 119	9 501	8 801	18 302	
Ex-nuptial: Single births Twins Triplets	1 766 17	907 14	859 20	1 766 34	1 846 17	967 21	879 12	1 846 33	
Total ex-nuptial	1 783	921	879	1 800	1 863	988	891	1 879	
Total	20 217	10 475	9 932	20 407	19 982	10 489	9 692	20 181	

<sup>(</sup>a) Includes only those confinements which resulted in one or more live births.

Multiple births registered in South Australia during 1974 comprised 193 cases of twins, 2 cases of triplets and 1 case of quadruplets, representing an average of 9.8 multiple confinements per 1000 confinements. There is a marked tendency for multiple births to be of the same sex, there being 139 cases of twins of the same sex registered during the year compared with only 54 cases of one male and one female.

Nuptial confinements classified according to the relative age groups of the parents, and ex-nuptial confinements classified to the age group of the mother are shown for 1974 in the following table.

Confinements: Relative Ages of Parents, South Australia, 1974(a)

Age Group of Father			Age Grou	p of Moth	er (Years)			Total
(Nuptial Births) (Years)	Under 20	20-24	25-29	30-34	35-39	40-44	45 and over	(b)
Under 20 20-24 25-29 30-34 35-39 40-44 45-49 50 and over Not stated	211 29 4 1 	64 2 734 3 263 460 80 20 4 3	335 3 912 2 132 416 91 27 9	1 16 275 1 137 623 200 35 24 2	1 16 71 253 225 66 20	2 7 21 83 42 12		351 3 971 7 679 3 836 1 397 622 178 68 17
Mothers: Married Unmarried	1 419 812	6 635 557	6 927 300	2 313 120	652 53	167 16	6 2	18 119 1 863
Total	2 231	7 192	7 227	2 433	705	183	8	19 982

<sup>(</sup>a) Includes only those confinements which resulted in one or more live births. (b) Includes not stated.

The table which follows shows the number of confinements classified by duration of marriage and previous issue. Previous issue is the number of liveborn children of the existing marriage born before the current confinement.

Nuptial Confinements: Duration of Marriage and Previous Issue of Mother South Australia, 1974

D	Number of -	Previous Issue of Marriage							
Duration of Marriage	Confinements (a)	0	1	2	3	4	5	6 and	
Under 1 year		1 978	50	3	1		_		
1 year	2 003	1 679	310	7	2			<del></del>	
2 years	. , 2 543	1 467	1 013	<b>5</b> 6	4	1		_	
3 years		1 061	1 390	158	10	1		-	
4 years		663	1 336	323	28 71		_		
5 years	1771	33 <b>5</b>	953	405	71	6	·	1	
6 years	1 269	169	599	408	77	14	-	1	
7 years	052	97	.330	385	119	17	4		
8 years	664	59	208	254	113	23	4	1	
9 years	472	40	101	193	103	27	7	ī	
0 years	372	22	69	136	97	30	12	5	
1	266	22 19	38	85	76	33	12	2	
1	167	11	17	58	47	20	12	2	
3 years		- 8 7	14	47	36	22	12 13	2	
4 years		7	<u>"9</u>	27	39	19	12	2 2 6	
5 years and over		13	22	61	76	70	51	69	
Not stated		-1	-2	3	3	_		1	
Total	18 119	7 629	6 461	2 609	902	283	127	91	

<sup>(</sup>a) Includes previous issue not stated.

Between 1965 and 1974 the number of nuptial first live births rose from 6944 to 7629 (i.e., from 35.46 to 41.68 per cent of total nuptial births registered). Over the same period the number of fourth or subsequent children born into existing marriages declined from 3685 to 1403, a fall from 18.82 to 7.67 per cent of total nuptial births registered. These figures reflect the decline in the average number of children born into the family unit.

The following table illustrates a trend, which has been apparent since 1964, towards a longer period after marriage before the birth of the first child. In particular, there has been a decrease in the percentage of nuptial first live births to women who had been married less than two years, from 67.32 per cent in 1965 to 47.94 per cent in 1974. A corresponding increase is evident in the two to four years duration of marriage groups; from 24.28 per cent to 41.83 per cent.

Only existing marriages are taken into account, therefore some inclusions in the table relate to the first birth of an existing marriage to a mother who has had a child or children by a previous marriage.

Nuptial First Live Births: Duration of Marriage of Parents South Australia

Donnation of	Nup	tial Firs	t Live B	irths	P	ercentag	e of To	tal
Duration of - Marriage	1971	1972	1973	1974	1971	1972	1973	1974
Under 5 months	703	653	611	535	8.42	8.13	8.05	7.01
5 months	566	513	463	399	6.78	6.39	6.10	5.23
6 months	497	425	332	317	5.95	5.29	4.37	4.16
7 months	175	159	119	119	2.10	1.98	1.57	1.56
8 months	124	135	119	116	1.49	1.68	1.57	1.52
9 months	216	206	161	161	2.59	2.57	2.12	2.11
0 months	212	165	165	145	2.54	2.05	2.17	1.90
11 months	210	178	174	186	2.52	2.22	2.29	2.44
Total under 1 year	2 703	2 434	2 144	1 978	32-37	30-30	28-24	25.93
l year	2 110	1 942	1 823	1 679	25.27	24.18	24.01	22:01
2 years	1 515	1 462	1 430	1 467	18.14	18.20	18.84	19.23
years	896	980	1 005	1 061	10.73	12.20	13.24	13-91
l years	480	531	489	663	5.75	6.61	6.44	8.69
years	253	285	273	335	3.03	3.55	3.60	4.39
years	139	177	156	169	1.66	2.20	2.05	2.21
7 years	81	77	108	97	0.97	0.96	1.42	1.27
B years and over	170	139	163	179	2.04	1.73	2.15	2.35
Not stated	3	5	1	1	0.04	0.06	0.01	0.01
Total	8 350	8 032	7 592	7 629	100.00	100.00	100.00	100.00

#### **DEATHS**

The 10 236 deaths registered in South Australia during 1974 was the highest number ever recorded, contrasting with a relatively low crude death rate of 8.40 per thousand of mean population. Although crude death rates in excess

of 16.0 were recorded in the 1860s, the rate has not exceeded 9.0 since 1956, with the lowest ever rate of 8.06 being recorded in 1961. Other fluctuations in the number of deaths and the crude death rate over time can be seen in the Statistical Summary, Appendix A.

Deaths: Numbers Registered and Rates, South Australia

Wasan	Nu	mber Regist	ered	Crude Death Rate (a)				
Year -	Males	Females	Persons	Males	Females	Persons		
1970	5 576	4 562	10 138	9.63	7.87	8.75		
1971	5 310 5 477	4 376 4 287	9 686 9 764	9·04 9·23	7·43 7·19	8·23 8·21		
1973 1974	5 501 5 728	4 334 4 508	9 835 10 236	9·18 9·42	7·18 7·39	8·18 8·40		

<sup>(</sup>a) Number of deaths per 1 000 of estimated mean population.

Deaths: Deaths Registered in Age Groups, South Australia

A on Coour	Males				Females			Persons	
Age Group	1972	1973	1974	1972	1973	1974	1972	1973	1974
			_	_					
Jnder 1 year	212	174	188	155	102	124	367	276	312
year	21	16	17	10	13	9	31	29	26
years	11	12	-8		6	5	16	18	13
years	10	11	5	5 5	4	7	15	15	12
years	6	7	. 6	6	- 6	- 3	12	13	12 9
Total under 5 years	260	220	224	181	131	148	441	351	372
5-9 years	25	20	- 23	19	14	12	- 44	34	35
0-14 years	27	13	20	19	12	îĩ	46	25	31
5-19 years	75	95	113	31	29	24	106	124	137
0-24 years	71	67	83	16	20	28	87	^8 <del>7</del>	111
5-29 years	51	57	63	24	18	29	75	75	92
0-34 years	45	46	43	30	20	39	75	66	82
35-39 years	59	61	87	32	29	33	91	90	120
0-44 years	123	97	106	57	63	53	180	160	159
5-49 years	211	202	234	109	115	96	320	317	330
0-54 years	309	317	320	142	151	171	451	468	491
55-59 years	451	438	451	235	195	188	686	633	639
0-64 years	584	593	611	281	304	302	865	897	913
55-69 years	707	723	728	350	374	360	1 057	1 097	1 088
70-74 years	680	759	774	477	502	521	1 157	1 261	1 295
75-79 years	689	660	670	666	667	700	1 355	1 327	1 370
30-84 years	594	614	615	744	746	739	1 338	1 360	1 354
35-89 years	366	383	394	541	616	672	907	999	1 066
00-94 years	123	114	140	266	250	291	389	364	431
95 years and over	27	22	29	67	78	91	94	100	120
All ages	5 477	5 501	5 728	4 287	4 334	4 508	9 764	9 835	10 236

A long established trend of increases in the number of deaths at the higher ages has been offset to some degree by a decrease in those in the younger age groups. The effect of this trend related to the changes in age distribution of the population

is illustrated in the next tables, which show age-specific death rates, *i.e.* deaths in each age group expressed as a rate per 1 000 of the population in that age group. Because age constitution of the population is known accurately only at censuses, the periods shown are those with a census date as their centre.

Age-specific Death Rates: Males, South Australia(a)

Ann Carre				Death 1	Rate (b)			
Age Group	1880-82	1900-02	1920-22	1932-34	1946-48	1953-55	1960-62	1970-72
0-4	51-85	32-12	19.98	9.90	8-09	6-41	5.82	4.66
5-9	3.33	2.81	2.33	1.18	1.00	0.52	0.50	0-43
0-14	2.59	1.85	1.55	1.08	0.68	0.65	0-46	0.38
5-19	4.48	2.88	2.41	1.69	1.42	1.50	1.08	1.48
0-24	4.85	4.19	3.47	2.35	1.44	1.88	1.37	1.55
5-29	6.32	5.16	3.67	2.51	1.59	1.70	1.59	1.12
0-34	7.51	5.30	3.97	2.51	1.88	1.57	1.62	1.41
5-39	9.00	6.77	5.12	3.23	2.41	2.29	2.08	2.04
0-44	12.25	8.50	6.10	4.73	3-63	3.56	3.43	3.15
5-49	16.10	10.26	8.37	6.82	6.12	5-48	5.44	5.49
0-54	17-29	14.19	11.58	9.82	10.74	10-16	9-24	9.37
5-59	25.28	20.74	18-99	15.11	16-28	15.71	15.75	16.01
0-64	31.77	30.23	26.02	24.98	26.08	24.33	24.39	25.10
5-69	46-67	47-24	41.62	36.14	40-08	39-31	37.84	41.00
0-74	63.52	64-27	62.49	57-07	60-79	62.59	59.47	64.42
F 70	92.49	89.66	105.50	92.60	97.69	94.55	88-56	96.09
0-84	138.02	140-35	158.90	147-86	145.56	141.64	135-85	142-39
	247.47				248.89	235.84	227.39	230.02
and over	241-41	246-96	269-50	257.03	240.99	433-04	221-39	230-02
All ages	15.76	12.03	10.75	9-29	10-87	9-80	9.00	9.31

<sup>(</sup>a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

Age-specific Death Rates: Females, South Australia(a)

A	Group				Death	Rate (b)			
Age	Group	1880-82	1900-02	1920-22	1932-34	1946-48	1953-55	1960-62	1970-72
0-4		 45-36	27-20	16-29	8-29	7-12	5.01	3-93	3-39
5-9		 3.28	2.02	2.30	1.04	0-54	0.45	0-35	0.32
0-14		 2.49	1.64	1-32	0.88	0-38	0.42	0.30	0.29
5-19		 4.16	3.47	2.71	1.25	0.75	0.52	0-37	0.65
0-24		 5-59	4.16	2.91	2.36	1.04	0.63	0-58	0.48
5-29		 8.01	5.00	3-95	2.73	1.65	0-85	0.70	0.60
0-34		 7-67	5.66	4-18	2.66	1.91	0.99	0.96	0.91
5-39		 10.29	6.90	5.27	3.85	2.03	1.79	1.33	1.18
0-44		 9.76	7.85	4-99	4.10	3-48	2.56	1-80	1.86
5-49		 11.65	8.20	6.42	5.80	4-59	3.65	3-03	2.95
0-54		 13.09	10-83	9-18	8.06	7.09	5.88	5-22	4.60
5-59		 14.86	14.08	10.65	11.24	10.33	9.04	7.82	7-41
0-64		 24-30	20.45	18-07	17-68	14-97	14.06	12.74	12-16
5-69		 36-27	35-51	33-15	27.16	25.22	23-01	21.05	20-32
0-74		 53.10	53.80	46.20	42.19	42.17	40-35	35-52	33-42
5-79		 93.21	87-96	83.56	75.53	72.07	72-20	58-28	57-60
0-84		 94.83	126-07	131-63	121-15	121-57	109-92	108-61	99-42
5 and c	ver	161-90	222-58	232-84	233-59	214-35	215.80	199-38	186-55
All ag	es	 13-97	10-25	9-00	8-23	9.19	8-31	7-38	7.50

<sup>(</sup>a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

<sup>(</sup>b) Average annual number of deaths per 1 000 of population at ages shown.

<sup>(</sup>b) Average annual number of deaths per 1 000 of population at ages shown.

#### CAUSES OF DEATH

The classification of causes of deaths in Australia since 1907 has been based on the International Lists of Causes of Deaths (ICD). From time to time revisions to these lists have affected the comparability of the figures. Up to 1949 the effect of these revisions had been negligible but the introduction in 1950 of the Sixth Revision of the ICD introduced major changes which, together with the adoption of more flexible rules for selecting the underlying cause where certificates of cause of death showed more than one cause, affected the comparability of figures for years before 1950 with those for 1950 and later. A complete classification of causes of deaths for each State and Territory of Australia for 1950 according to both the Fifth and Sixth Revisions was published by the Australian Statistician in Demography 1950, Bulletin No. 68. The Seventh Revision adopted in Australia in 1958 did not affect comparability significantly.

The Eighth Revision brought into use in Australia in 1968 provided a few changes to the structure of the tabular list, e.g. the transferring of cerebrovascular diseases from the section covering diseases of the nervous system and sense organs to that covering diseases of the circulatory system. Comparability has not been affected greatly by the changes with the exception of the categories within the section now entitled 'Certain Causes of Perinatal Morbidity and Mortality'—the Seventh Revision title was 'Certain Diseases of Early Infancy'. Seventh Revision classification in this section was related to the condition in the infant whereas the Eighth Revision provides primarily for classification wherever possible to maternal diseases or conditions or to the circumstances of the birth rather than to the resultant condition in the infant. ICD Eighth Revision code numbers have been shown where appropriate in the tables which follow.

In the following table, deaths registered in 1974 are shown classified according to the abbreviated list of the Eighth Revision together with the percentages from each cause and the rate per 10 000 of mean population.

Causes of Death: South Australia, 1974

Abbreviated Classification (a)	ICD Code Number	Number of Deaths	Proportion of Total	Rate per 10 000 of Mean Population
		_	Per cent	
4 Enteritis and other diarrhoeal	008, 009	7	0.07	0∙06
5 Tuberculosis of respiratory system	010-012	2	0.02	0.02
6 Other tuberculosis including late effects	013-019	2 8 3	0-08	0.07
11 Meningococcal infection	036		0.03	0.02
18 Other infective and parasitic diseases	Remainder \	21	0.20	0.17
·	000-136 ∫			
19 Malignant neoplasms	140-209	1 840	17-98	15-10
20 Benign and unspecified neoplasms	210-239	14	0.14	0.11
21 Diabetes mellitus	250	187	1.83	1.54
22 Avitaminoses and other nutritional deficiency	260-269	9	0.09	0.07
23 Anaemias	280-285	19	0.18	0.16
24 Meningitis	320	7	0.07	0.06
25 Active rheumatic fever	390-392	1	0.01	0.01
26 Chronic rheumatic heart disease	393-398	87	0.85	Ŏ·71
27 Hypertensive disease	400-404	131	1.28	1.08
28 Ischaemic heart disease	410-414	3 127	30.55	25.67
29 Other forms of heart disease	420-429	449	4.39	3.69
30 Cerebrovascular disease	430-438	1 367	13.35	11.22
31 Influenza	470-474	19	0.18	0.16
JI Illiuciiza	7/0-7/7	17	0.10	0.10

# BIRTHS AND DEATHS

# Causes of Death: South Australia, 1974 (continued)

Code Deaths of Total Number	Population
Per cent	
32 Pneumonia	2.20
33 Bronchitis, emphysema and asthma 490-493 354 3.46	2.91
34 Peptic ulcer 531-533 57 0.56	0.47
35 Appendicitis 540-543 7 0.07	0.06
36 Intestinal obstruction and hernia 550-553, 560 36 0.35	0.30
37 Cirrhosis of liver 571 124 1.21	1.02
38 Nephritis and nephrosis	0.62
39 Hyperplasia of prostate	0.15
40, 41 Complications of pregnancy, childbirth	
and puerperium 630-678 4 0-04	0.03
42 Congenital anomalies	0⋅86
43 Birth injury, difficult labour and other anoxic	
and hypoxic conditions $\dots \dots \int 764-768$ , $\int 59 0.58$	0.48
₹ 772, 776 <b>{</b>	
760-763,	
44 Other causes of perinatal mortality \ \ \ \ 769-771, \ \ \ 103 \ \ 1.01	0.85
773-775,	
( 777-779 J	0.02
45 Symptoms and ill-defined conditions 780-796 101 0-99	0.83
46 All other diseases	6·86 3·23
47 Motor vehicle accidents	
48 All other accidents	1.98
49 Suicide and intentional self-inflicted injuries E950-E959 134 1-31	1.10
49 Suicide and intentional self-inflicted injuries E950-E959 134 1.31 50 All other external causes	0.19
Jo An Other external causes E900-E999 25 0.22	0.13
Total all causes	84.03

<sup>(</sup>a) No deaths were recorded in 1974 in the following categories: 1 Cholera (000), 2 Typhoid fever (001), 3 Bacillary dysentery and amoebiasis (004, 006), 7 Plague (020), 8 Diptheria (032), 9 Whooping cough (033), 10 Streptococcal throat and scarlet fever (034), 12 Acute poliomyelitis (040-043), 13 Smallpox (050), 14 Measles (055), 15 Typhus and other rickettsioses (080-083), 16 Malaria (084), 17 Syphilis and its sequelae (090-097).

The following table shows for 1974 the main causes of deaths in selected age groups.

Main Causes of Death: Age Groups, South Australia, 1974

Classi	national fication mber	44.4	Age Group and Cause of Death	Deaths	Pro- portion of Total Deaths in Age Groups	Proportion of Total Deaths from the Specified Cause
			0-4 Years	No.	%	%
764-768, 786		}	Other perinatal causes, including maternal conditions, prematurity, etc. Congenital anomalies Birth injury, difficult labour, etc. Symptoms and ill-defined conditions Accidents, poisonings, violence Other causes	103 80 59 44 34 52	27·7 21·5 15·9 11·8 9·1 14·0	100·0 76·2 100·0 43·6 4·3
			5-14 Years			
140	)-E999 )-209 )-759		Accidents, poisonings, violence Malignant neoplasms Congenital anomalies Other causes	35 12 3 16	53·0 18·2 4·6 24·2	4·4 0·7 2·9

# Main Causes of Death: Age Groups, South Australia, 1974 (continued)

International Classification Number	Age Group and Cause of Death	Deaths	Pro- portion of Total Deaths in Age Groups	Pro- portion of Total Deaths from the Specified Cause
		No.	%	%
E800-E999 140-209 320-389 480-493	Accidents, poisonings, violence	195 25 8 5 15	78·6 10·1 3·2 2·0 6·1	24·7 1·4 7·7 0·8
	25-34 Years			
E800-E999 140-209 480-493 393-398, 410-429	Accidents, poisonings, violence Malignant neoplasms Pneumonia, bronchitis, emphysema, asthma Heart disease Other causes	95 33 12 10 24	54·6 19·0 6·9 5·7 13·8	12·0 1·8 1·9 0·3
	35-44 Years			
E800-E999 140-209 393-398, 410-429 430-438	Accidents, poisonings, violence Malignant neoplasms Heart disease Cerebrovascular disease Other causes	76 68 59 16 60	27·2 24·4 21·2 5·7 21·5	9·6 3·7 1·6 1·2
	45-54 Years			
393-398, 410-429 140-209 E800-E999 430-438 571 480-493	Heart disease Malignant neoplasms Accidents, poisonings, violence Cerebrovascular disease Cirrhosis of liver Pneumonia, bronchitis. emphysema, asthma Other causes	273 217 94 57 47 30 103	33·3 26·4 11·5 6·9 5·7 3·7 12·5	7·5 11·8 11·9 4·2 37·9 4·8
	55-64 Years			
393-398, 410-429 140-209 430-438 480-493 E800-E999 571	Heart disease Malignant neoplasms Cerebrovascular disease Pneumonia, bronchitis, emphysema, asthma Accidents, poisonings, violence Cirrhosis of liver Other causes	589 434 135 86 81 28 199	38·0 28·0 8·7 5·5 5·2 1·8 12·8	16·1 23·6 9·9 13·8 10·2 22·6
	65-74 Years			
393-398, 410-429 140-209 430-438 480-493 E800-E999 250	Heart disease Malignant neoplasms Cerebrovascular disease Pneumonia, bronchitis, emphysema, asthma Accidents, poisonings, violence Diabetes mellitus Other causes	998 534 303 165 57 56 270	41.9 22.4 12.7 6.9 2.4 2.3 11.4	27·2 29·0 22·2 26·5 7·2 29·9
	75 Years and over			
393-398, 410-429 430-438 140-209 480-493 440-448 E800-E999 250	Heart disease Cerebrovascular disease Malignant neoplasms Pneumonia, bronchitis, emphysema, asthma Diseases of arteries, arterioles and capillaries Accidents, poisonings, violence Diabetes mellitus Other causes	1 727 849 520 301 262 124 98 460	39·8 19·6 12·0 6·9 6·0 2·8 2·3 10·6	47·1 62·1 28·3 48·4 76·2 15·7 52·4

The long-term trends in deaths and death rates from some of the main causes are discussed in the following pages. One of the factors affecting these trends has been the reduction of mortality in early childhood. This improvement has increased the number of persons reaching higher ages where the risk from degenerative diseases is greatest; consequently deaths from degenerative diseases now constitute a higher proportion of deaths than formerly.

#### Infectious Diseases

Deaths from certain infectious diseases over the period 1915 to 1974 are shown in the following table.

Deaths from Certain Infectious Diseases, South Australia(a)

	Period	Respiratory Tuberculosis (010-012)		Scarlet Fever (034·1)	Diphtheria (032)	Whooping Cough (033)	Acute Polio- myelitis (040-043)	Measles (055)
Annual Av	verage:							
1915-19		339	311	4	.94	21	(b)	14
1920-24			28	. 9	70	28	`ģ	. 7
1925-29		313	12	2	25	13	3	12
1930-34		261	7	2	12	13	3	6
1935-39		211	4	1	27	11	6	2
1940-44		190	3	2	30	10	2	9
1945-49		161	ī	1	7	8	9	6
1950-54		. 81			1	. 2	23	3
1955-59		43			Ī	1	2	3
					_	Ī	1	2
1965-69		20						2
1970-74		. 8			_			_

<sup>(</sup>a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

In 1956 a poliomyelitis immunisation program began and since then the incidence of and deaths from this disease have declined (see Part 6.5).

There has been a long-term downward trend in deaths from respiratory tuberculosis. This has been assisted by the introduction in March 1952 of compulsory chest X-ray surveys of the population, enabling early detection and therefore more effective treatment of the disease. Of those diseases shown in the preceding table, in 1974 there were two deaths from respiratory tuberculosis.

The decline in the incidence of deaths from infectious diseases can be attributed to several factors, the more important being advances in medical science, improved hygiene and the general acceptance of immunisation of infants and young children against such diseases as diphtheria and whooping cough.

#### Malignant Neoplasms

For 1950 and subsequent years, deaths from malignant neoplasms (generally known as 'cancer') have included those deaths classified to neoplasms of lymphatic and haematopoietic tissues (ICD 200-209). This latter group, which accounted for 210 of the 1 840 deaths attributed to malignant neoplasms in 1974, includes such diseases as lymphosarcoma, Hodgkin's disease, leukaemia and multiple myeloma.

The following table shows deaths from malignant neoplasms according to site of the disease for selected years.

<sup>(</sup>b) Not separately recorded.

**POPULATION** 

Malignant Neoplasms: Deaths, Site of Disease, South Australia (a)

20 479 201 34 107 61 47 84 88 50 84 128	Number 35 546 291 44 146 52 63 110 79 43 83 160 1 652	29 586 321 53 147 78 72 119 81 52 92 166 1 796	38 616 336 38 155 50 49 108 76 58 106 210
479 201 34 107 61 47 84 88 50 84	546 291 44 146 52 63 110 79 43 83	586 321 53 147 78 72 119 81 52 92	616 336 38 155 50 49 108 76 58 106 210
201 34 107 61 47 84 88 50 84	291 44 146 52 63 110 79 43 83	321 53 147 78 72 119 81 52 92	336 38 155 50 49 108 76 58 106 210
34 107 61 47 84 88 50 84	44 146 52 63 110 79 43 83	53 147 78 72 119 81 52 92	38 155 50 49 108 76 58 106 210
107 61 47 84 88 50 84 128	146 52 63 110 79 43 83	147 78 72 119 81 52 92	155 50 49 108 76 58 106 210
47 84 88 50 84	63 110 79 43 83 160	72 119 81 52 92 166	49 108 76 58 106 210
84 88 50 84 128	110 79 43 83 160	119 81 52 92 166	108 76 58 106 210
84 88 50 84 128	110 79 43 83 160	119 81 52 92 166	108 76 58 106 210
50 84 128	43 83 160	52 92 166	58 106 210
84 128	83 160	92 166	106 210
84 128	83 160	92 166	106 210
128	160	166	210
1 383	1 652	1 796	1 840
	Rate (b)	)	
0.19	0.30	0.24	0.31
4.50	4.72	4.87	5.06
3 1.89		2.67	2.76
0.32		0.44	0.31
			1.27
) 0.57	0.45	0.65	0.41
0.44	0.54	0.60	0.40
			0.89
			0.62
			0.48
. 5-17	0 3 7	0.15	0 10
0.79	0.72	0.77	<b>0</b> ·87
3 1.20	1.38	1.38	1.72
13:00	14.26	14.93	15·10
1 2 1 2	0 0.57 1 0.44 8 0.79 1 0.83 4 0.47 1 0.79 3 1.20	0 0.57 0.45 1 0.44 0.54 8 0.79 0.95 1 0.83 0.68 4 0.47 0.37 1 0.79 0.72 3 1.20 1.38	0 0.57 0.45 0.65 1 0.44 0.54 0.60 8 0.79 0.95 0.99 1 0.83 0.68 0.67 4 0.47 0.37 0.43 1 0.79 0.72 0.77 3 1.20 1.38 1.38

<sup>(</sup>a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966. (b) Per 10 000 of mean population.

The next table indicates a steady increase in deaths from malignant neoplasms and the table of age-specific death rates which follows shows how the rate increases with age. Therefore, the increase over the period in the rate at all ages is partly because of the increasing proportion of the population in the higher age groups.

Deaths from Malignant Neoplasms (140-209), South Australia (a)

Period	Nu	mber of Dea	ths	Death Rate (b)		
renod	Males	Females	Persons	Males	Females	Persons
Annual Average:						
1950-54	462	483	945	12.11	12.96	12.53
1955-59	565	519	1 084	12.79	12.06	12.43
1960-64	656	617	1 273	13.16	12.58	12.88
1965-69	820	698	1 518	14.77	12.67	13.72
1970-74	958	784	1 742	16.13	13.17	14.64
Year:						
1970	876	776	1 652	15.13	13.39	14.26
1971	912	748	1 660	15.53	12.70	14.11
1972	970	791	1 761	16.35	13.27	14.81
1973	975	821	1 796	16.27	13.61	14.93
1974	1 055	785	1 840	17.36	12.86	15.10

<sup>(</sup>a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

# Malignant Neoplasms: Age-specific Death Rates, South Australia (a)

Aga Graus	Death Rate (b)									
Age Group	1932-34	1946-48	1953-55	1960-62	1965-67	1970-72				
			M	ALES						
0-4		0.49	1.18	1.02	1.14	1.27				
5-14	0.12	0.51	1.05	0.82	0.97	0.79				
15-24	0.31	0.07	1.64	0.86	0.90	0.90				
25-34	1.05	1.18	1.21	1.33	1.62	1.24				
35-44	3.36	2.57	4.63	4.29	3.72	5.36				
45-54	8.65	12.35	10.42	11.57	15.09	14.80				
55-64	35.41	32.77	33.43	36.52	43.46	43.94				
65-74	89-18	82.62	69.54	83.67	87.28	101.64				
75 and over	147.57	148-98	149-45	142.29	151.06	175-14				
All ages	11.40	13-60	12.54	12.86	14.09	15.69				
			Fer	MALES						
0-4	0.30	0.41	1.24	0.79	0.57	0.57				
5-14	0.13	0.23	0.34	0.79	0.55	0.38				
15-24	0.25	0.40	0.72	0.46	0.82	0.56				
25-34	1.49	1.74	1.99	2.16	1.70	2.39				
35-44	6.32	4.42	5.95	6.66	5.68	4.88				
45-54	16.86	15.39	12.67	16.69	16.14	15.83				
55-64	34.61	30.12	32.91	28.19	30.33	30.90				
65-74	55.98	57.21	52.26	52.24	49.90	55.38				
75 and over	115.15	108.52	98.41	99.76	94.61	102.54				
All ages	11.37	13.12	12.64	12.68	12.30	13.13				

<sup>(</sup>a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

<sup>(</sup>b) Number of deaths per 10 000 of mean population.

<sup>(</sup>b) Average annual number of deaths per 10 000 of population at ages shown.

#### Cerebrovascular Disease

The increase in both numbers and rates of deaths from cerebrovascular disease (commonly referred to as 'a stroke') is further evidence of the effect of the increased proportion of the population at higher ages.

Although the rate generally has fallen since 1954, deaths from this cause still constituted 19.6 per cent of deaths of persons aged seventy-five years and over in 1974. During the period 1930-34 deaths classified to this cause were only 8.6 per cent of all deaths, but during 1970-74 they were 14.0 per cent of all deaths.

Deaths from Cerebrovascular Disease (430-438), South Australia(a)

Nu	imber of De	eaths	Death Rate (b)			
Males	Females	Persons	Males	Females	Persons	
201	231	432	6.94	8.01	7-47	
231	294	525	7.84	9.95	8.90	
271	368	639	8.96	12.03	10.51	
321	431	752	9.92	13.21	11.57	
404	553	957	10.62	14.82	12.70	
481	614	1 095	10.89	14.27	12.55	
490	645	1 135	9.83	13.16	11.48	
567	731	1 298	10.21	13.26	11.73	
582	808	1 390	9.82	13.58	11.70	
579	822	1 401	10.00	14.19	12.09	
			10.40	14.12	12.26	
				13.29	11.59	
			9.76	12.91	11.34	
550	817	1 367	9.05	13.39	11.22	
	Males  201 231 271 321 404 481 490 567 582 579 611 587	Males         Females           201         231           231         294           271         368           321         431           404         553           481         614           490         645           567         731           582         808           579         822           611         832           587         792           585         779	201 231 432 231 294 525 271 368 639 321 431 752 404 553 957 481 614 1 095 490 645 1 135 567 731 1 298 582 808 1 390 579 822 1 401 611 832 1 443 587 792 1 379 585 779 1 364	Males         Females         Persons         Males           201         231         432         6.94           231         294         525         7.84           271         368         639         8.96           321         431         752         9.92           404         553         957         10.62           481         614         1.095         10.89           490         645         1.135         9.83           567         731         1.298         10.21           582         808         1.390         9.82           579         822         1.401         10.00           611         832         1.443         10.40           587         792         1.379         9.89           585         779         1.364         9.76	Males         Females         Persons         Males         Females           201         231         432         6·94         8·01           231         294         525         7·84         9·95           271         368         639         8·96         12·03           321         431         752         9·92         13·21           404         553         957         10·62         14·82           481         614         1095         10·89         14·27           490         645         1 135         9·83         13·16           567         731         1 298         10·21         13·26           582         808         1 390         9·82         13·58           579         822         1 401         10·00         14·19           611         832         1 443         10·40         14·12           587         792         1 379         9·89         13·29           585         779         1 364         9·76         12·91	

<sup>(</sup>a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

#### Diseases of the Heart

The following table shows the number of deaths attributed to heart disease and rates per 10 000 of the mean population since 1940.

The percentage of total deaths classified to heart disease increased from 25.5 per cent in the period 1940-44 to 36.1 per cent during 1970-74. Over the same period the rate per 10 000 of population increased from 26.1 to 30.1. Apart from the effect of the ageing population, there are other difficult-to-measure factors which have influenced this large increase, namely changes in the mode of certification and classification, and improvement both in diagnosis and certification; therefore any comparison of numbers, rates and percentages of deaths from this cause over the period ought only be made with caution.

<sup>(</sup>b) Number of deaths per 10 000 of mean population.

Deaths from Diseases of the Heart (393-398, 410-429), South Australia (a)

Period	Nu	mber of De	aths	D	eath Rate (	<b>b</b> )
Period	Males	Females	Persons	Males	Females	Persons
Annual Average:						
1940-44	886 1 094 1 342 1 519 1 776 2 036 2 080	704 822 996 1 111 1 245 1 432 1 503	1 590 1 916 2 338 2 630 3 021 3 468 3 583	29·29 33·84 35·22 34·38 35·61 36·69 35·06	23·02 25·15 26·70 25·81 25·42 25·97 25·24	26·14 29·47 31·01 30·15 30·56 31·35 30·14
Year:  1970	2 136 1 976 2 074 2 105 2 108	1 575 1 445 1 456 1 484 1 555	3 711 3 421 3 530 3 589 3 663	36·88 33·64 34·95 35·13 34·68	27·18 24·53 24·43 24·59 25·48	32·03 29·08 29·68 29·84 30·07

<sup>(</sup>a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

#### **External Causes**

In the table which follows, deaths from selected categories of external cause (accidents, poisonings and violence) are shown for recent years.

Deaths: External Causes (Accidents, Poisonings and Violence), South Australia

	Cause										
Year	Motor Vehicle Traffic Accidents (E810- E819)	Drownings	Accidental A Poisonings (E850- E877)	Accidental Falls (E880- E887)	Suicide and (Intention- al) Self- inflicted Injury (E950- E959)	Homicide and Injury Purposely Inflicted (E960- E969)	Other External Causes (Balance E800- E999)	Total Deaths for Causes (E800- E999)			
	MALES										
1970	262	27	5	57	97	14	78	540			
1971	213	35	5	35	87	9	66	450			
1972	212	41	4	39	94	10	75	475			
1973		36	ļ	34	79	5 9	75	444			
1974	298	23	4	42	95	. 9	85	556			
1970	92	-			ALES 41	14	20	254			
1971	88	3 .	5 3	68 63	35	13	30	236			
1972	81	6	3	60	33	13	12	201			
1973	90	11	6	66	42	á	51	269			
1974	86	- <del>7</del>	2 6 2	61	39	14	29 30 12 51 26	235			

Motor vehicle traffic accident deaths are considerably fewer than deaths caused by either heart disease, cerebrovascular disease or malignant neoplasms. However it ranks with the other major causes when considered in terms of 'life

<sup>(</sup>b) Number of deaths per 10 000 of mean population.

years lost'. In 1974 there were 248 deaths from all causes of persons in the 15-24 years age group and of these 59.3 per cent were caused by motor vehicle traffic accidents.

Deaths: External Causes (Accidents, Poisonings and Violence), Age Groups South Australia, 1974

	Cause										
Age Groups	Motor Vehicle Traffic Accidents (E810- E819)	Accidental Drownings (E830, E832, E910)		Accidental Falls (E880- E887)	Suicide and (Intention- al) Self- inflicted Injury (E950- E959)	Homicide and Injury Purposely Inflicted (E960- E969)	Other External Causes (Balance E800- E999)	Total Deaths for Causes (E800- E999)			
Under		,	-	MA	LES						
15 years 15-24 years 25-34 years 35-44 years 45-54 years 55-64 years 65-74 years	11 128 33 34 27 32 17	8 3 2 2 4 1		1 2 1 2 5	2 21 14 16 20 11	$\begin{array}{c} \frac{2}{1} \\ \frac{2}{3} \\ \frac{1}{1} \end{array}$	14 14 12 10 12 10 5	37 167 64 66 67 59 36			
75 years and over	16		1	31	4	_	8	60			
Total	298	23	4	42	95	9	85	556			
				FEM.	ALES						
Under 15 years 15-24 years 25-34 years 35-44 years 45-54 years 55-64 years 55-67 years 75 years and over	12 19 17 4 9 12 7	4 · · · · · · · · · · · · · · · · · · ·	2   	  1  9 51		4 1 5 1 2 —	10 4 2 3 1 1	32 28 31 10 27 22 21			
Total	86	7	2	61	39	14	26	235			

#### INFANT MORTALITY

The infant mortality rate, i.e. the number of deaths of children under one year to every 1 000 live births, has shown a marked decline from 148.77 in 1875-79 to 15.62 in 1970-74. The two lowest rates recorded in this State were 13.52 in 1973 and 15.46 in 1974. The number of infant deaths and infant death rates for selected years since 1851 are shown in the Statistical Summary, Appendix A.

Many factors have contributed to the remarkable improvement in the infant mortality rate, principally measures taken (both legislative and educative) to control preventible diseases and the provision of facilities by the Mothers and Babies Health Association for the promotion of child health. The rate for male infant deaths is consistently higher than for female infant deaths.

Infant Mortality: Age at Death, South Australia

Year	Under 1 Day	1 Day and under	1 Week and under			6 Months		12 Months
1 car	1 Day	1 Week	4 Weeks			12 Months		Rate (a)
				MA	LES	· · · · · · · · · · · · · · · · · · ·		1
1970	95	68	15	22	16	10	226	19-56
1971	79	52	14	19	26	14	204	17.29
1972	90	54	11	12	31	14	212	18.76
1973	67	40	10	23	22	12	174	16.61
1974	75	57	13	13	19	11	188	17.92
				FEM.	ALES			
1970	57	33	8	13	18	12	141	12.75
1971	72	40	8 12 18	15	13	10	162	14.47
1972	54	31	18	20	17	10 15 7	155	14.70
1973	35	23	-9	19	9	7	102	10.27
1974	46	26	11	12	14	15	124	12.79
				PERS	SONS			
1970	152	101	23	35	34	22	367	16.23
1971	151	- 92 - 92	26	34	39	24	366	15.92
1972	144	85	29	32	48	<u>2</u> 9	367	16.80
1973	102	63	<u>1</u> 9	42	31	<u>1</u> 9	276	13-52
1974	121	83	24	25	33	26	312	15.46

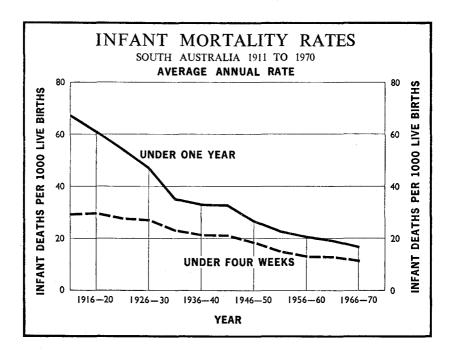
<sup>(</sup>a) Rate per 1 000 live births.

The causes of infant deaths in 1974 classified according to age group are shown in the following table.

Infant Mortality: Causes in Age Groups, South Australia, 1974

Cause of Death -			Age Group			Total
Cause of Death	Under 1 Week	1 Week and under 4 Weeks	and under			12 Months
Infective and parasitic diseases (000-						
_ 136)	1				4	5
Diseases of nervous system and sense organs (320-389)		2	1	3	1 .	7
519)	_	_	1	3	3	7
Congenital anomalies (740-759) Perinatal causes:	42	11	9	3 5	6	73
Maternal diseases and conditions (760-763)	18 9	3 2	=	=	_	21 11
Conditions of placenta and cord (770-771)	23	_	_		<u>-</u> -	23
Haemolytic disease (774-775) Anoxic and hypoxic conditions	. 2	_			_	2
n.e.c. (776)	44 21	3	_	_	Ξ	47 22
Other perinatal causes (769, 772, 773, 778)	36	_		. <b>—</b> .		- 36
Sudden death (cause unknown) (795) All other diseases	2 6	7	14	18 2	3	37 12
Accidents, poisonings, violence (E800-E999)	_	1	_	2	6	9
Total all causes	204	24	25	33	26	312

Statistics of infant mortality shown in the previous table are inclusive of the neo-natal segment of perinatal deaths which are discussed in the following paragraphs. It should be noted that owing to reconciliation difficulties between the sources of information from which the data is compiled, minor differences will be noted when comparing neo-natal deaths with infant deaths under four weeks shown in this section.



#### PERINATAL DEATHS

# Perinatal deaths comprise:

- (a) Foetal deaths: a child not born alive, of at least twenty weeks gestation or 400 grams weight;
- (b) Neo-natal deaths: a live-born child dying within twenty-eight days after birth.

Legislation which became effective from the beginning of 1968 requires a Medical Certificate of Cause of Perinatal Death to be filled in by the attending

medical practitioner and forwarded to the Principal Registrar. Before 1968 neo-natal deaths were not separated for registration purposes from other deaths. However, from 1937 to 1967 a separate register of all still births (foetal deaths) was maintained by the Principal Registrar; registration of a still birth was compulsory and related to any child which after the twenty-eighth week of gestation did not breathe or show any signs of life at any time after being completely expelled from its mother. Only total numbers of the registered still births were recorded and no detailed statistics were compiled.

Foetal Deaths, Neo-natal Deaths and Perinatal Deaths: Number and Rate South Australia

Year -	Ma	les	Fem	ales	Tot	tal
rear -	Number	Rate	Number	Rate	Number	Rate
		Foeta	l Deaths (a	)		
1970	127 142 119 120 119	10·87 11·89 10·42 11·33 11·22	131 108 110 124 117	11·70 9·55 10·32 12·33 11·93	258 250 229 244 236	11·28 10·75 10·37 11·82 11·56
		Neo-nat	AL DEATHS (	<i>b</i> )		
1970	177 143 156 115 144	15·32 12·12 13·81 10·98 13·73	101 123 103 70 84	9·13 10·98 9·77 7·05 8·67	278 266 259 185 228	12·29 11·57 11·86 9·07 11·30
		PERINAT	AL DEATHS (	(c)		
1970	304 285 275 235 263	26·03 23·87 24·08 22·18 24·79	232 231 213 194 201	20·73 20·43 19·99 19·29 20·49	536 516 488 429 464	23·43 22·20 22·11 20·77 22·73

<sup>(</sup>a) Foetal death rate is the number of foetal deaths per 1 000 of the total of live births and foetal deaths.

Despite the improvements which have already been achieved, infant and perinatal mortality still presents one of the most challenging areas for medical and scientific research. In this respect, the decline in the number of deaths attributable to haemolytic disease of new-born (see following table), in particular Rh incompatibility, indicates the benefit of such research.

<sup>(</sup>b) Neo-natal death rate is the number of neo-natal deaths per 1 000 live births.

<sup>(</sup>c) Perinatal death rate is the number of perinatal deaths per 1 000 of the total of live births and foetal deaths.

Perinatal Deaths: Causes of Death, South Australia

Cause of Death	1971	1972	1973	1974
Chronic circulatory and genito-urinary				
disease in mother  Other maternal conditions unrelated to	3	2	-	1
pregnancy	12	15	14	7
Toxaemias of pregnancy	27	37	39	34
Maternal ante- and intrapartum infection Difficult labour with abnormality of	3	10	4	3
bones, organs or tissues of pelvis	2	2	2	1
Difficult labour with disproportion Difficult labour with malposition of	2 2	2	1	2
foetus	13	7	8	3
forces of labour	1	7		4
fied complications	1	5	1	1
child-birth	54	44	53	67
Conditions of placenta	100	91	75	93
Conditions of umbilical cord	34	19	29	18
Birth injury without mention of cause	6	4	3	ĭ
Haemolytic disease of new-born  Anoxic and hypoxic conditions not	16	14	11	2
elsewhere classified	82	68	55	79
Other conditions of foetus and new-born	55	56	32	56
Congenital anomalies	82	91	82	78
Infections of foetus and new-born	3	2	4	ĭ
Other diseases of foetus and new-born	20	11	16	12
External causes of injury to new-born		1		1
Total	516	488	429	464

#### EXPECTATION OF LIFE

The expectation of life at age x is defined as the average number of years lived after age x by each of a group of persons aged exactly x years. Because detailed information of the age structure and mortality experience of the population is required, the calculation of the expectation of life for each age is generally based on a period which spans a population census (the only time at which a sufficiently accurate age distribution is available).

The table which follows shows the expectation of life at specified ages in Australia based on mortality experience in the decade to 1910 and for the three years spanning each of the Censuses of 1921, 1933, 1947, 1954, 1961 and 1966. Generally, the figures shown in the table indicate that the number of years which people of all ages in Australia can expect to live has increased steadily since the turn of the century.

Expectation of Life, Australia

	Age	1901-1	0 1920-22	1932-34	1946-48	1953-55	1960-62	1965-67
					Males			
0		55.2	59.2	63.5	66-1	67-1	67.9	67-6
5		57.9	60.4	62.6	63.8	64.3	64.8	64-4
10		53.5	56.0	58.0	59.0	59.5	59.9	59.5
15		49.0	51.4	53.4	54-3	54.7	55.1	54.6
20		44.7	47.0	48.8	49.6	50-1	50.4	50.0
25		40.6	42.7	44-4	45.0	45.5	45.8	45.4
30		36.5	38.4	39.9	40-4	40.9	41-1	40.7
35		32.5	34· <b>2</b>	35.5	35-8	36.3	36∙5	36∙0
40		28.6	30∙1	31.1	31.2	31.7	31.8	31.4
45		24.8	26.0	26.9	26.8	27.2	27.4	27.0
50		21.2	22.2	22.8	22.7	22.9	23.1	22.8
55		17.7	18.5	19.0	18.8	19.0	19-2	18⋅8
60		14.3	15.1	15∙6	15.4	15.5	15∙6	15.3
65		11.3	12.0	12.4	12.3	12.3	12.5	12.2
70		8.7	9.3	9.6	9.6	9.6	9.8	9.5
75		6.6	6.9	7.2	7.2	7.3	7.5	7.3
80	•• ••	5.0	5.0	5.2	5.4	5.5	5.6	5.5
					Females			
0		58.8	63.3	67-1	70.6	72.8	74.2	74.2
5		60.8	63.6	65.6	67.9	69.6	70.8	70.6
10		56.4	59.2	61.0	63.1	64.8	65.9	65.8
15		51.9	54.6	56.3	58.3	59.9	61.0	60.8
20		47.5	50-0	51.7	53.5	55.1	56.2	56.0
25		43.4	45.7	47.2	48.7	50.2	51.3	51· <b>2</b>
30		39.3	41.5	42.8	44.1	45.4	46.5	46.3
35		35.4	37.3	38-4	39.5	40·7	41.7	41.6
40		31.5	33.1	34.0	34.9	36.0	37.0	36.9
45		27.6	29.0	29.7	30.5	31.4	32.3	32.3
50		23.7	24.9	25.6	26.1	27.0	27.9	27.8
55		19.9	21.0	21.6	22.0	22.8	23.6	23.6
60		16.2	17.2	17.7	18-1	18.8	19.5	19.5
65		12.9	13.6	14.2	14.4	15.0	15.7	15.7
70		10.0	10.4	11.0	11.1	11.6	12.2	12.2
75		7.6	7.7	8.2	8.3	8.7	9.2	9.2
80		5.7	5.6	6.0	6.0	6.3	6.7	6.7

# 5.4 MIGRATION

# Powers and Legislation of the Australian Government

Under the Constitution, the Australian Parliament is empowered to make laws with respect to immigration, emigration, aliens and the influx of criminals.

Immigration into Australia is regulated by the Migration Act 1958-1973 which came into force on 1 June 1959. The Aliens Act 1947-1973 provides that a register of aliens shall be maintained for every State or mainland Territory of Australia and that, unless exempted, aliens sixteen years of age and over are

required to register with the Department of Immigration and Ethnic Affairs. Under the provisions of the Australian Citizenship Act 1948-1973 aliens may, upon application, be granted citizenship; generally, this is after three years residence but may be earlier under certain circumstances. Legislation and conditions of immigration into Australia and of naturalisation are discussed in detail in the Official Year Book of Australia.

#### Assisted Migration

From early colonial times free or assisted passages were given to large numbers of migrants from Britain, and to lesser numbers from other countries. Responsibility for migrant recruitment and transport was originally with the Colonial Governments, then the States, and in 1920-21 was transferred to the Federal Government.

After the 1939-45 War, Australia and Britain entered into agreements to provide free passages for ex-servicemen and assisted passages for other British migrants. The first agreement ended in 1955, but the assisted passage agreement continued until 1972. Since then Australia has provided unilateral assistance for British migrants.

Large-scale assisted migration from Europe began with Australian participation in the resettlement of Displaced Persons under the auspices of the International Refugee Organisation. Agreements with a number of European countries, either directly or through the agency of the Inter-Governmental Committee for European Migration, resulted in a preponderance of European assisted migration to Australia over the next twenty-five years. During this time Australia developed unilateral arrangements to assist other migrants from Europe, the United States and elsewhere.

Since May 1973 there has been a uniform policy on assisted migration from all countries, with priority given to the close dependent relatives of Australian residents and to persons whose skills are needed in Australia.

Assisted settler arrivals from January 1947 to December 1974 totalled 1998 100 of whom 1 107 795 were British. Of the total, 225 334 stated on arrival that their proposed destination was South Australia.

#### Overseas Arrivals and Departures

Since 1924 the movements of overseas travellers have been classified into two main categories according to declared intention regarding residence short term and long term (including permanent). For short term movements, overseas visitors and Australian residents are identified separately.

The principal categories of travellers according to stated purpose of travel are as follows:

Permanent movement; consisting of persons arriving with stated intent to settle permanently in Australia, and Australian residents departing with stated intent to reside permanently abroad.

Long term movement; consisting of the arrival of visitors and the departure of residents with stated intent to stay (in Australia or in a country abroad respectively) for twelve months or more.

Short term movement; consisting of all other movements, including the movement of Australian troops irrespective of period of stay.

Separate figures for permanent and long term movements are not available on a State basis; these movements are combined in the table below showing overseas arrivals at, and departures from, South Australia. This table does not include persons who disembarked in other ports in Australia and subsequently settled in South Australia or South Australians who embarked from other ports for overseas. From 1974, the State of embarkation or disembarkation has been replaced by the State of clearance of passengers by Customs and Immigration Authorities.

# Overseas Arrivals and Departures, State of Embarkation/Disembarkation South Australia

#### Intended Term of Residence

		Short Term							
Year -	Long Term and Permanent		Australian Residents		Visitors		Total		
rear -	Males	Females	Males	Females	Males	Females	Males	Females	Persons
				AR	RIVALS	(a)			
1965	3 720	3 945	594	692	560	358	4 874	4 995	9 869
1966	3 739	3 857	729	820	583	367	5 051	5 044	10 095
1967	2 315	2 352	634	810	537	315	3 486	3 477	6 963
1968	2 400	2 455	729	511	772	308	3 901	3 274	7 175
1969	2 206	2 159	1 204	559	775	361	4 185	3 079	7 264
1970	2 392	2 364	700	687	654	289	3 746	3 340	7 086
1971	1 713	1 694	1 263	654	760	321	3 736	2 669	6 405
1972	913	1 048	430	448	538	339	1 881	1 835	3 716
1973	783	768	311	32 <b>9</b>	222	104	1 316	1 201	2 517
1974 (b)	546	543	308	301	97	82	951	926	1 877
				DEP.	ARTURI	ES (a)			
1965	2 010	2 155	1 876	1 411	708	546	4 594	4 112	8 706
1966	2 358	2 275	1 345	1 504	850	687	4 553	4 466	9 019
1967	2 002	1 972	1 793	1 139	796	520	4 591	3 631	8 222
1968	1 951	1 964	1 612	1 009	919	457	4 482	3 430	7 912
1969	2 077	2 004	1 718	1 249	1 143	601	4 938	3 854	8 792
1970	1 567	1 640	1 080	1 069	658	429	3 305	3 138	6 443
1971	1 169	1 291	1 534	763	752	344	3 455	2 398	5 853
1972	907	951	571	605	492	302	1 970	1 858	3 828
1973	1 154	1 128	822	714	547	237	2 523	2 079	4 602
1974 (b)	697	651	556	436	356	166	1 609	1 253	2 862

<sup>(</sup>a) Crew members and 'through' passengers (i.e. people remaining on board a ship while in Australian waters or travelling in an aircraft passing through Australia) are excluded.

The number of long term and permanent arrivals in 1964 (10 120) and departures in 1966 (4633) were the highest ever recorded in South Australia.

#### Australian Citizenship

The Nationality and Citizenship Act 1948 which came into force on 26 January 1949, created the status of 'Australian Citizen'. Under the Australian Citizenship Act 1948-1973 all migrants, regardless of origins, are required to satisfy uniform requirements for the grant of citizenship.

<sup>(</sup>b) From 1974, State of clearance replaced State of embarkation and disembarkation. Clearances and embarkation or disembarkation are often in the same State but there are some exceptions.

In the table which follows, numbers of migrants granted citizenship are shown according to previous citizenship. Figures for 1974 include, for the first time, citizens of the United Kingdom (and Colonies) and other Commonwealth nations. Before 1 December 1973 these persons were granted citizenship by registration.

Previous Citizenship of Persons Granted Australian Citizenship, South Australia

Nationality	1969	1970	1971	1972	1973	1974
Czechoslovak	15	18	19	76	104	57
Dutch	335	311	180	165	187	108
Finnish	28	23	- 11	12	18	19
French	17	29	16	32	61	35
German	294	253	161	161	279	132
Greek	498	550	608	626	961	671
Hungarian	59	55	52	25	23	22
Indian						20
Italian	647	684	534	453	739	435
Lebanese	12	17	19	27	49	27
Malaysian						19
Polish	154	88	164	120	104	71
Singaporean						19
South African						15
Spanish	21	21	29	7	26	27
Swiss	5	4	6	9	10	15
Turkish	5	13	6	25	32	16
UK and colonies, citizens of						238
US American	6	8	5	9	22	25
Yugoslav	232	253	207	244	370	224
Stateless	49	75	21	25	49	34
Other	238	193	172	159	178	146
Total	2 615	2 595	2 210	2 175	3 212	2 375

There were 2 795 certificates of citizenship granted in 1973 and 1 804 in 1974. Each certificate covers the new citizen and his/her children under the Australian Citizenship Act 1948-1973. At the end of December 1974 about 40 000 registered adult aliens were residing in South Australia.

#### Entry for Residence

From December 1975, people living overseas who wish to come to Australia as settlers must obtain visas for entry. Under a reciprocal agreement with New Zealand, however, New Zealand citizens may enter Australia without previous authority.

In Australian immigration, priority is given to 'family reunion' involving spouses and dependent children (normally under eighteen years of age) and parents of permanent residents of Australia. Nomination is necessary and sponsored parents are eligible for consideration only if, on arrival, they will not be seeking to join the Australian workforce and will not become a charge on public funds. Nominees under the 'family reunion' rules are required to meet only health and character requirements.

Nominations in favour of, or applications from, refugees, displaced persons or those whose circumstances warrant special consideration on compassionate grounds are considered under relaxed eligibility rules and selection standards in the light of their particular circumstances.

Citizens of the United Kingdom, Ireland or Canada may be considered for entry on a sponsored or unsponsored basis where close association with a permanent resident of Australia or a former close association with Australia can be shown. The people concerned must be self-supporting and intend retiring in Australia. While all other requirements must be met, no test on 'occupation' is imposed.

Other people overseas may be considered for entry on a sponsored or unsponsored basis, in general, on the basis of employment availability.

Spouses and dependent children are considered with applicants or nominees. All members of the 'family unit' involved must be assessed as able to meet health and character requirements. They must have a firm intention to settle permanently in Australia and be capable of integrating satisfactorily into the Australian community.

# 5.5 CHARACTERISTICS OF THE POPULATION

Statistics relating to characteristics of the population of South Australia are derived from information obtained at each population census. At the 1971 Census, these characteristics include the sex distribution, age distribution and the marital status of the population. Information was also obtained on the country of birth, period of residence, nationality, religion, educational attainment, occupational status, industry and occupation of the population. Figures for censuses before 1966 exclude full-blood Aborigines.

#### Sex Distribution

The masculinity of the population of South Australia, i.e. the number of males to each 100 females at each census is shown below.

Census Year	Masculinity	Census Year	Masculinity		
1844	126-1	1901	. 101.5		
1846	130-4	1911	103.1		
1851	124-3	1921	100-6		
1855	103.8	1933	100-3		
1861	105-3	1947	98.2		
1866	109.2	1954	102.7		
1871	105.6	1961	102-3		
1876	107.0	1966	101.0		
1881	111.4	1971	99.7		
1891	105.6				

At each Census except 1947 and 1971 the State's masculinity was greater than 100, i.e. there were more males than females in South Australia. The lower rate at the 1947 Census was partly attributable to the loss of male lives in the 1939-45 War, while the subsequent increase is mainly because of the predominantly male migration inflow of the early post-war period. This is shown

very clearly in the following table which gives masculinity in five-yearly age groups at the five Censuses 1947 to 1971. The larger number of males in the younger age groups reflects the fact that the masculinity of births is consistently over 100 while the higher male death rate is reflected in the very low masculinity ratios of the older age groups.

Masculinity of Population According to Age, South Australia Censuses 1947 to 1971

Age Last Birthday					
(Years)	1947	1954	1961	1966	1971
0-4	104-30	104-46	103-21	105.73	105.07
5-9	106-18	104.85	104.98	104.01	105-61
10-14	104.60	105-38	105.75	105.26	103-90
15-19	100.43	105.27	105.55	104.70	103-43
20-24	95.29	113.81	109-21	103.05	99.73
25-29	96.70	111.99	110.23	104.00	103.03
30-34	99.26	106.65	110.78	105.49	101-34
35-39	101-27	105.80	105.31	108-13	103.85
40-44	107-23	107.05	104.86	104.43	107.41
45-49	99.93	110-99	107-65	104.45	103.07
50-54	89.83	104.54	106.49	104.43	101-38
55-59	96.52	91.53	105-42	101.79	101.44
60-64	93.65	87.94	88-90	97.59	94.03
65-69	88.05	87.80	77.48	80.52	88.85
70-74	83.07	81.72	78.01	68-46	71.06
75-79	77.76	73.53	71.88	69.06	59.34
80-84	70.90	66.71	62.44	60.33	56.42
85-89	65.19	62.38	59.06	52.12	48.27
90 and over	56.17	53.08	40.60	41.25	38-44
All ages	98-16	102.72	102-32	100-99	99.73

#### Age Distribution

Details of the age distribution of the population are of particular importance because, as well as revealing changes which have occurred in the age structure from one census to the next, they also supply basic material for the calculation of fertility rates, mortality rates, annuity rates and probabilities of survival.

Age distribution of the population at the 1966 and 1971 Censuses is given in the following table. During the five-year period the population increased by 78 723 persons (7·2 per cent). Large absolute changes in population occurred in the age groups 20-24, which increased by 20 199, and 35-39, which fell by 6 739. The movement in these two age groups is partly because of the post 1939-45 War birth rate increase and the low birth rates of the depression years of the early 1930s respectively.

The mean or average age of the population of South Australia (excluding full-blood Aborigines before 1966) at the Census of 1954 was 32·2 years (males 31·5 and females 32·9); in 1961 it was 31·3 years (males 30·6 and females 32·1), but at 1971 it had risen again to 31·6 years (males 30·8 and females 32·5).

Age	Distribution	of	Population,	South	Australia
	Censi	ises	1966 and	1971	

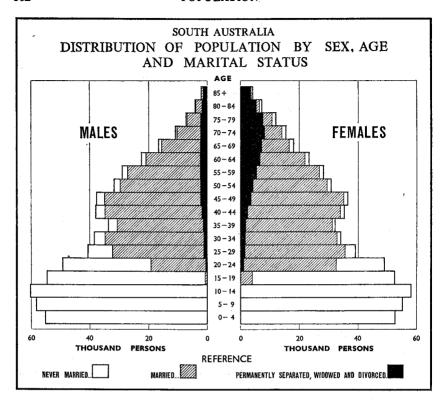
A T (75) (1.5)	30 June 1966			3	Increase		
Age Last Birthday - (Years)	Males	Females	Persons	Males	Females	Persons	Persons
0-4	55 499	52 492	107 991	55 308	52 641	107 949	(—) 42
5-9	58 151	55 908	114 059	58 274	55 179	113 453	( <del>``</del> ) 606
0-14	55 235	52 474	107 709	60 358	58 090	118 448	10 739
5-19	52 927	50 552	103 479	54 334	52 532	106 866	3 387
0-24	39 698	38 525	78 223	49 144	49 278	98 422	20 199
5-29	33 791	32 493	66 284	40 647	39 450	80 097	13 813
0-34	31 983	30 318	62 301	34 791	34 330	69 121	6 820
5-39	37 738	34 900	72 638	33 572	32 327	65 899	(-)6739
0-44	38 335	36 710	75 045	37 937	35 319	73 256	(—) 1 789
5-49	33 235	31 818	65 053	37 673	36 551	74 224	9 171
0-54	31 034	29 719	60 753	31 686	31 256	62 942	2 189
55-59	24 993	24 553	49 546	28 917	28 507	57 424	7 878
0-64	19 259	19 734	38 993	22 295	23 711	46 006	7 013
5-69	14 082	17 487	31 569	16 408	18 467	34 875	3 306
0-74	10 665	15 578	26 243	11 042	15 540	26 582	339
5-79	7 777	11 261	19 038	7 236	12 194	19 430	392
0-84	3 997	6 625	10 622	4 277	7 581	11 858	1 236
5-89	1 415	2 715	4 130	1 690	3 501	5 191	1 061
0 and over	382	926	1 308	462	1 202	1 664	356
Total	550 196	544 788	1 094 984	586 051	587 656	1 173 707	78 723

The next table shows that the proportion of the population under 15 years of age fell markedly between 1901 and 1947, rose significantly between 1947 and 1961 but fell slightly between 1961 and 1971. Fifteen years and under 65 years showed an upward trend to 1947, but has since maintained a fairly stable level of approximately 61 per cent. The proportion of the population 65 years and over continued to rise over the period 1901 to 1954, but since 1954 has fallen slightly.

Proportional Age Distribution of Population, South Australia Censuses 1901 to 1971

Males			Females			Persons				
Ce	nsus	Under 15 Years	15 Years and Under 65	65 Years and Over	Under 15 Years	15 Years and Under 65	65 Years and Over	Under 15 Years	15 Years and Under 65	65 Years and Over
						Per cent				
1901		36-0	60.0	4.0	35.9	59.8	4.3	35-9	59.9	4.2
1911		31-1	64.4	4.5	31.3	63.8	4.9	31.2	64.1	4.7
1921		32.2	62.8	5.0	31.3	63.5	5.2	31.7	63.2	5-1
1933		26.8	66.6	6.6	26.0	66.6	7.4	26.4	66.6	7·0
1947		25.1	67.0	7.9	23.5	67.0	9.5	24.3	67.0	8.7
1954		29.2	62.9	7-9	28.6	61.3	10-1	28.9	62-1	9.0
1961		31.4	61.2	7.4	30.7	59-1	10.2	31-1	60-1	8·8
1966		30.7	62.4	7.0	29.5	60.5	10.0	30-1	61.4	8.5
1971		29-7	63.3	7.0	28.2	61.8	10.0	29.0	62.5	8.5

The following diagram shows details of the sex, age and marital status of the population at the 1971 Census.



#### **Marital Status**

The marital status of the population was ascertained at the 1966 and 1971 Censuses, when a statement of never married, married, married but permanently separated (legally or otherwise), widowed, or divorced was required in respect of every person enumerated.

In 1971 the number of persons who were stated to have been never married represented 45.8 per cent of the total population, approximately the same proportion as in 1966. Married persons in 1971 represented 47.0 per cent of the total compared with 45.6 per cent in 1966.

At the 1966 Census 79·1 per cent of widowed persons were female and this proportion had increased to 80·4 per cent in 1971. The disparity between the number of widowed males and widowed females is the result of the greater longevity of females coupled with the usually younger age at marriage.

# Marital Status of Population, South Australia Censuses 1966 and 1971

		30 Jun	e 1966		30 June 1971			
Marital Status	Males		Females		Males		Females	
•	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Never married:								
Under 15 years of age 15 years of age and over	168 881	30-69	160 866	29.53	173 940	29.68	165 910	28-23
	110 983	20.17	81 906	15.03	113 130	19-30	85 163	14-49
Total never married	279 864	50-87	242 772	44.56	287 070	48-99	251 073	42-72
Married Married but perm-	249 571	45.36	249 290	45.76	275 465	47.00	276 232	47-01
anently separated	5 503	1.00	6 214	1.14	6 565	1.12	7 204	1.23
Widowed	11 019	2.00	41 658	7.65	11 364	1.94	46.617	7.93
Divorced	4 239	0.77	4 854	0.89	5 587	0.95	6 530	1.11
Total	550 196	100.00	544 788	100-00	586 051	100-00	587 656	100-00

# Country of Birth

The Australian-born content of the population in South Australia was 85.7 per cent in 1911, 88.3 per cent in 1921, 90.3 per cent in 1933, and 93.3 per cent in 1947. Overseas migration had lowered the proportion of Australian-born persons to 86.1 per cent by 1954, while in 1971 the proportion was down to 76.1 per cent. The proportion of the population born in the United Kingdom, including the Republic of Ireland, fell from 11.0 per cent in 1911 to 5.1 per cent in 1947 and rose to 12.6 per cent in 1971.

# Country of Birth of Population, South Australia Censuses 1966 and 1971

	30 June 1966		30 June 1971		Increase
Country of Birth	Persons	Males	Females	Persons	Persons
Australia	849 036	439 365	454 273	893 638	44 602
New Zealand	2 188	1 657	1 569	3 226	1 038
Europe: United Kingdom and Republic of			A		
Ireland	122 030	74 929	73 091	148 020	25 990
Germany	16 213	7 582	7 828	15 410	()803
Greece	14 660	7 716	7 001	14 717	57
Italy	30 848	17 675	14 753	32 428	1 580
Netherlands	12 443	6 252	5 491	11 743	(—)700
Poland	7 253	4 271	2 787	7 058	(—)195
Yugoslavia	6 352	5 269	3 662	8 931	2 579
Other	22 606	12 863	9 952	22 815	209
Total Europe	232 405	136 557	124 565	261 122	28 717
Other countries	11 355	8 472	7 249	15 721	4 366
Total born outside Australia	245 948	146 686	133 383	280 069	34 121
Total	1 094 984	586 051	587 656	1 173 707	78 723

Of persons born in Europe, the greatest numerical increase between 1966 and 1971 was in persons born in the United Kingdom, including the Republic of Ireland (25 990 persons). The greatest proportionate increase (40.6 per cent) was recorded for persons born in Yugoslavia. The percentage increase over the period 1966 to 1971 of persons born in the United Kingdom, Greece and Italy was much less than for the period 1961 to 1966.

## Religion

Information on the religious affiliations of the population is obtained only at population censuses. There is, however, no legal obligation to answer the question on religion and at the 1971 Census respondents representing approximately 6 per cent of the South Australian population chose not to answer.

1966 details of religion are excluded from the following table because of lack of comparability in question wording and schedule design between 1966 and 1971.

Religious Denomination of Population, South Australia
Census 30 June 1971

Religious Denomination	Males	Females	Persons	Persons Percentage of Total
Christian:				
Baptist	10 146	11 864	22 010	1.9
Brethren	573	619	1 192	0-1
Catholic, Roman (a)	57 861	55 950	113 811	9.7
Catholic (a)	63 147	65 208 12 434	128 355	10.9
Churches of Christ	10 368 138 951	12 434 147 803	22 802 286 754	1.9
Church of England	6 929	8 309	286 /34 15 238	24·4 1·3
Lutheran	30 702	31 939	62 641	5·3
Methodist	102 778	112 550	215 328	18.3
Orthodox	17 194	15 442	32 636	2.8
Presbyterian	19 416	20 504	39 920	3.4
Salvation Army	3 838	4 349	8 187	ŏ.7
Seventh Day Adventist	1 271	1 604	2 875	ŏ·ż
Protestant (undefined)	12 921	13 686	26 607	2.3
Other (including Christian undefined)	11 342	12 178	23 520	2.0
Total Christian	487 437	514 439	1 001 876	85-4
Non-Christian:				
Hebrew	552	579	1 131	0.1
Other	1 199	853	2 052	0.2
Total Non-Christian	1 751	1 432	3 183	0.3
	2 091	1 660	3 751	0.3
lo religion	57 868	38 006	95 874	8.2
No reply	36 904	32 119	69 023	5.9
Total	586 051	587 656	1 173 707	100.0

<sup>(</sup>a) So described in individual census schedules.

The Church of England has always had the greatest number of adherents, its relative importance having been fairly consistent since 1866 when it accounted for 31.8 per cent of answers compared with 24.4 per cent in 1971.

Changes in the pattern of religious affiliation appear to some extent attributable to migratory movements. This is particularly noticeable in the case of Catholics (i.e. persons described as either Catholics or Roman Catholics) who accounted for only 14·3 per cent of the answers in 1933 compared with 20·6 per cent in 1971, thus reflecting the pattern of post-war migration.

#### Period of Residence in Australia

The post-war migration flow into Australia is shown by the number of persons who have taken up residence in Australia since the late 1940s.

Period of Residence in Australia of Persons in South Australia Censuses 1966 and 1971

Period of Residence in -	:	30 June 196	56	30 June 1971			
Australia	Main	Panala	les Persons		Visitors		
	Males	Females		Males	Females	Persons	Persons
Under 1 year	12 235 10 332	11 062 9 742	23 297 20 074	7 686 8 309	7 460 8 034	15 146 16 343 )	2 123
2 years and under 3 3 years and under 4 4 years and under 5	8 834 5 961 4 349	8 262 5 757 4 441	17 096 11 718 8 790	6 950 4 962 6 032	6 724 4 721 6 003	13 674 9 683 12 035	1 103
5 years and over Not stated	87 919 1 935	73 586 1 533	161 505 3 468	103 438 6 887	92 166 7 005	195 604 13 892	466
Born outside Australia Born in Australia	131 565 418 631	114 383 430 405	245 948 849 036	144 264 439 365	132 113 454 273	276 377 893 638	3 692
Total	550 196	544 788	1 094 984	583 629	586 386	1 170 015	3 692

At the 1971, and previous censuses, details of period of residence in Australia were sought from overseas born. In 1947 there were 43 552 residents in South Australia (including visitors) who were not born in Australia and only 5 per cent of these had lived in Australia for less than five years. By 1954 the number of such persons had arisen to 110 605, of whom 51 per cent had resided in Australia for less than five years. By 1971 the number (excluding visitors) had increased to 276 377, but the proportion of those who had lived in Australia for less than five years had fallen to 24.2 per cent.

For the first time, in 1971, overseas born persons were asked to specify whether they were a resident of Australia or a visitor to Australia. At the 1971 Census, of the 280 069 overseas born persons in South Australia, 3 692 (1.3 per cent) were visitors to Australia.

## **Nationality**

The nationality (or country of allegiance) of the population of South Australia at June 1966 and 1971 is given in the following table. For purposes of this table, Irish nationality is included with British. Decreases in the number of persons of most nationalities in 1971 are partly because of British naturalisation of former aliens. Persons of British nationality represented 99.7 per cent of the State population in 1947, but this proportion had fallen to 94.9 per cent by 1971.

Nationality (i.e. Allegiance) of Population, South Australia Censuses 1966 and 1971

Nationality	30 June 1966		30 June 1971		Increase
Nationality	Persons	Males	Females	Persons	Persons
British (a): Born in Australia	. 849 036	439 365	454 273	893 638	44 602
Born outside Australia	193 955	114 961	104 670	219 631	25 676
Total British	1 042 991	554 326	558 943	1 113 269	70 278
Foreign:					
Dutch	6 677	2 391	2 226	4 617	() 2 060
German	. 5 682	2 173	1 996	4 169	( <del>-</del> ) 1 513
Greek	9 863	4 400	4 403	8 803	() 1 060
Italian	. 17 762	9 006	8 367	17 373	() 389
Polish	1 611	572	497	1 069	( <del></del> ) 542
US American	816	1 022	731	1 753	937
Yugoslav	2 492	2 007	1 577	3 584	1 092
Other	5 932	5 095	3 964	9 059	3 127
Stateless	1 158	5 059	4 952	10 011	8 853
Total foreign	51 993	31 725	28 713	60 438	8 445
Total	1 094 984	586 051	587 656	1 173 707	78 723

<sup>(</sup>a) Includes Irish.

## **Educational Attainment**

Level of Schooling

At the 1971 Census information was sought for the first time on the highest level of schooling attended. The following table summarises the details obtained for South Australia.

Level of Schooling of Population, South Australia Census 1971

TTI-Land Tarrel Addended	Currentl	Currently Attending School			Not Currently Attending School		
Highest Level Attended -	Males	Females	Persons	Males	Females	Persons	
Child not yet attending school		••		56 767	53 990	110 757	
Primary:	40 144	27 010	77 154	4.674	£ 070	0.753	
Grades 1, 2, 3		37 010		4 674	5 079	9 753	
Grade 4	12 881	12 129	25 010	4 819	5 253	10 072	
Grade 5	12 989	12 300	25 289	12 054	12 236	24 290	
Grade 6	12 671	12 196	24 867	16 043	15 943	31 986	
Grade 7	12 384	12 052	24 436	82 239	93 903	176 142	
Secondary:							
1st Year	12 460	11 636	24 096	28 317	31 023	59 340	
2nd Year	11 934	11 524	23 458	45 022	49 247	94 269	
3rd Year	10 147	9 849	19 996	73 368	83 512	156 880	
4th Year	7 849	6 515	14 364	51 029	49 130	100 159	
5th Year	3 598	2 523	6 121	60 070	44 690	104 760	
Total at school	137 057	127 734	264 791		•••	••	
Other, never attended school	••	••	••	2 206 12 386	2 920 12 996	5 126 25 382	
Total population	137 057	127 734	264 791	448 994	459 922	908 916	

## Educational Qualifications

At the 1971 Census information was sought on the type of educational qualification obtained. The following table shows that of the total population 15 years of age and over, only 19.5 per cent had obtained any educational qualification since leaving school.

# Educational Qualifications of Population, South Australia Census 1971

Highest Level of Qualification Obtained	Males	Females	Persons
No qualification	294 747	376 279	671 026
Trade level	76 688	7 595	84 283
Technician level	13 331	13 439	26 770
Tertiary (excluding degrees) Bachelor degree, post graduate-	12 721	12 369	25 090
diploma or equivalent	9 341	3 063	12 404
Higher degree level or equivalent	1 477	302	1 779
Qualification not classified by level	3 773	8 676	12 449
Inadequately described	33	23	56
Total with qualifications	117 364	45 467	162 831
Total population 15 years of age and over	412 111	421 746	833 857

## Other Characteristics

Some census details of occupation, occupational status and industry are set out in Part 7.1.

PART 6

# SOCIAL ENVIRONMENT

# 6.1 LAW, ORDER AND PUBLIC SAFETY

# LAW AND ADMINISTRATION

The law in force in South Australia consists of:

- (i) so much of the common law of England and such English statute law as came into force on the original settlement of the colony in 1836;
- (ii) Acts passed by the Parliament of the State of South Australia, together with regulations, rules, orders, etc. made thereunder;
- (iii) Acts passed by the Australian Parliament within the scope of its allotted powers, together with regulations, rules, orders, etc. made thereunder;
- (iv) Imperial law binding South Australia as part of the British Commonwealth, as part of Australia or as a State—subject, since 1931, to the Statute of Westminster (this relates mainly to external affairs or matters of Imperial concern);
- (v) Case law (this consists of judicial decisions of the English, Australian, or State Courts, respectively, and represents an important part of the law in force in South Australia).

The scope of Australian legislation is limited to the subjects specified in the Australian Constitution. In some cases Australian Government powers of legislation are exclusive of, in others concurrent with, those of the State. In all cases of conflict, valid Australian laws override State laws.

#### LEGAL PROFESSION

Legal practitioners in South Australia are admitted to the Bar, after the prescribed academic training and service in articles, as barristers and solicitors. This means that the legal profession is not divided, as it is in New South Wales, Victoria and Queensland—a practitioner is entitled to act in either capacity.

The legal profession is controlled by the Legal Practitioners Act, 1936-1972. Rules of Court regulate articles of clerkship and prescribe the conditions of entry to the profession. Practitioners duly admitted to practice, and who are principals, have the right of audience in all courts of South Australia; those other than principals have this right in all courts except the Supreme Court. The Act provides for the hearing of charges of unprofessional conduct by the statutory committee of the Law Society and for its report to be referred to the Supreme Court which may make any order it thinks fit.

In 1975 there were 510 legal practitioners in private practice in South Australia.

#### LEGAL DEPARTMENT

In South Australia the Attorney-General is a Minister of State Parliament. There is a Solicitor-General who, under the Attorney-General, acts as legal adviser to the Government.

The Attorney-General is charged with the conduct of business relating to the Supreme Court and inferior Courts and the Crown Law Department (which includes the Crown Prosecutor) as well as statute law revision and consolidation. He also advises Ministers on questions on which his legal opinion is required, initiates and defends proceedings by and against the State and determines whether informations should be laid in cases of indictable offences.

The Attorney-General also administers Acts of Parliament relating to justices, coroners, lands titles, registration of companies and business names, liquor licensing and the Electoral Department.

#### SUPREME COURT

The various jurisdictions of the Court are civil, criminal, land and valuation, matrimonial causes and testamentary causes.

Judges of the Supreme Court are appointed by commission of the Governor on the advice of the Executive Council. A person may not be appointed a judge of the Supreme Court unless he is a legal practitioner of ten years standing.

The Supreme Court Act, 1935-1975, provides inter alia for the constitution, jurisdiction, powers and duties of the Supreme Court and its judges. One of the powers of the judges of the Court of particular importance is that of making Rules of Court regulating the procedure of the Court. In particular the Rules, which are published in the South Australian Government Gazette, regulate the admission to practice of practitioners of the Supreme Court and control their conduct.

There are at present ten judges of the Supreme Court, comprising the Chief Justice, Dr J. J. Bray, QC, and nine puisne judges. A judge holds office until the age of seventy years at a salary fixed by statute. The Court sits in Adelaide, but holds circuit sessions three times each year at Port Augusta and Mount Gambier.

#### Civil and Criminal Jurisdiction

Generally speaking, the Supreme Court has unlimited civil and criminal jurisdiction, except in respect of matters which are reserved for the original jurisdiction of Australian Courts. The Court as a rule determines its own practice.

Following the establishment of District Criminal Courts, jurisdiction to hear many indictable offences was vested in these Courts late in 1970.

Crimes and misdemeanours prosecuted by indictment in the Supreme Court must be tried before a jury of twelve persons who find as to the facts of the case; the penalty being determined by the judge. Capital punishment applies in the case of murder, treason and certain offences under the Crimes Act 1914-1975 and Crimes (Aircraft) Act 1963-1973. The Court has original jurisdiction over all litigious matters arising in the State except where its jurisdiction is excluded by statute. Its original jurisdiction is usually exercised by one judge although it is possible in theory to try a civil issue with a jury.

The Court also has power to restrain inferior courts from acting in excess of their jurisdiction and may, by order, compel them to enforce a legal right. The Court also acts as a court of appeal from inferior courts. During 1974 the Supreme Court heard 173 appeals from inferior courts. Of these 77 were dismissed, 71 were allowed, 9 were remitted for rehearing, 5 were withdrawn and orders had not been made for 6. A further five appeals were referred to the full court as special cases.

In proper cases, appeals may be carried from decisions of the Supreme Court to the High Court of Australia.

The following table gives details of persons tried and convicted for the years 1970 to 1974. In the post-war period to the end of 1974 a total of forty-seven persons have been sentenced to death in South Australia, forty-one of these sentences being subsequently commuted. The last execution in South Australia occurred in 1964; no female has been executed in the State since 1873.

#### Supreme and Circuit Courts: Trials and Convictions, South Australia

V	T	ried	Convicted	
Year –	Males	Females	Males	Females
1970	603	23	570	18
[971 (a)	188	14	178	14
1972	114 149	12 21	95 125	10 17
1974	153	10	132	10

<sup>(</sup>a) Comparability affected from 1971 by transfer of some jurisdiction late in 1970 to District Criminal Courts—see text above.

Details of convictions classified by type of offence are set out in the following table.

Supreme and Circuit Courts: Persons Convicted, South Australia(a)

Type of Offence	1970	1971 (b)	1972	1973	1974
Offences against the person:  Murder and attempted murder	6	9	4	5	8
dangering life Offences against females Unnatural offences Other offences against the person	34 116 21 10	16 11 4 3	14 7 2 2	17 16 4	24 20 — 3
Total		43	29	43	55
Offences against property: Robbery Breaking and entering and burglary Embezzlement and stealing by servants Fraud and false pretences Other offences against property	272 6 11	36 23 5 7	32 5 — 2 5	40 16  2 12	40 12 — 1 13
Total	352	71	44	70	66
Other offences: Forgery and offences against the currency Breach of recognisance	13 10 26	13 43 22	10 6 16	13 5 11	16 2 3
Total	49	78	32	29	21
Total (all offences)	588	192	105	142	142

<sup>(</sup>a) In the case of multiple charges, where more than one conviction is recorded, the most serious offence is counted.

## Testamentary Causes Jurisdiction

The Supreme Court in its testamentary causes jurisdiction is the only authority competent to grant probate of the will, or administration of the estate, of any deceased person who leaves real or personal property in the State. With a few exceptions, the property of a deceased person cannot be dealt with in any way until a grant has been obtained. Pending a grant of probate or administration, all property of a deceased person, in respect of which he died intestate, is vested in the Public Trustee. The Court does not issue a grant until succession duty (if any) on the estate has been paid or security accepted for the due payment of duty.

The powers of the Court are exercised by a judge, the Master and the Registrar or Deputy Registrar of Probates. The latter deal with all applications for probate and administration where there is no contention and any matters prescribed by the rules. In cases of doubt or difficulty, the Registrar may obtain the direction of a Judge. The records of the Court are available for public inspection, and copies of wills and other documents may be obtained.

Some statistics of the estates of deceased persons appear in Part 12.3.

<sup>(</sup>b) Comparability affected from 1971 by transfer of some jurisdiction late in 1970 to District Criminal Courts—see text page 170.

#### LOCAL AND DISTRICT CRIMINAL COURTS

Local and District Criminal Courts are now constituted under the Local and District Criminal Courts Act, 1926-1975. An amendment to the Act in 1969 increased the jurisdiction of local courts, established District Criminal Courts and provided for the appointment of a Senior Judge and other judges.

#### Local Courts

Local Courts were first established in South Australia by an ordinance of 1850 and originally had criminal as well as civil jurisdiction. The Local Courts Act, 1926 effected important alterations in the structure and jurisdiction of Local Courts by abolishing juries in Local Courts and also justices as constituent members of Courts of Full Jurisdiction (except on the application of a party), by conferring equitable jurisdiction on the Local Court of Adelaide of Full Jurisdiction, and by giving a full appeal to the Supreme Court on facts as well as on law from all judgments, determinations and orders of local courts in actions involving more than \$60.

Local Courts are divided into three groups—Full Jurisdiction, Limited Jurisdiction and Special Jurisdiction. The courts vested with all three jurisdictions are the Local Courts of Adelaide, Berri, Mount Gambier, Port Lincoln, Port Pirie and Whyalla. These courts may hear and determine actions for amounts up to \$20 000. The equitable jurisdiction provisions have also been extended to all Local Courts of Full Jurisdiction. Local Courts of Limited Jurisdiction may hear and determine claims of up to \$2 500, with special provisions for hearing 'small claims' as defined for a pecuniary sum not exceeding \$500. Courts of Special Jurisdiction may hear and determine any unsatisfied judgment summons whatever the amount of the judgment.

Local Courts: Summary of Transactions, South Australia

		Total Claims		Verdicts and Judgments			Service Executor Processing				
v	<b>′</b> еат	Sum- monses	Amount Sued				Judgment by Default		Total		Certifi-
1	ear	Issued (a)	For	Num- ber	Amount	Num- ber	Amount	Num- ber	Amount	for Service out of Juris- diction	cates
			\$,000		\$'000		\$'000		\$'000		
1969 1970 1971 1972 1973		93 679 96 261 98 181 101 780 95 474	8 684 10 048 13 435 19 128 19 660	1 989 1 681 1 916 1 595 1 564	466 520 1 291 1 346 1 447	47 535 44 516 45 013 45 082 40 657	4 362 4 368 5 501 4 911 6 034	49 524 46 197 46 929 46 677 42 221	4 828 4 888 6 792 6 257 7 480	1 805 1 697 1 787 1 755 752	1 703 1 734 1 821 1 583 1 142

<sup>(</sup>a) Including those withdrawn or settled out of Court.

A Local Court of Full Jurisdiction may be constituted of a Judge of the Supreme Court or a Local Court judge, and exercise all jurisdictions under the Act. A special magistrate may exercise limited jurisdiction and special jurisdiction, while two justices of the peace sitting together or one special justice sitting alone may exercise special jurisdiction only.

Any Local Court may reserve any question of law arising in any action for the decision of the Supreme Court, and any party who is dissatisfied with any final judgment, determination or order of a local court, if the claim exceeds \$500, may appeal to the Supreme Court. Appeals involving claims under \$500 may be made if leave of the Supreme Court is obtained.

Pursuant to Section 28 of the Act the Governor may appoint the Senior Judge or any other judge to make rules of court for carrying into effect the Act or any other Act conferring jurisdiction upon Local Courts.

## **District Criminal Courts**

These courts came into operation on 31 August 1970 and have jurisdiction to hear and determine many of the indictable offences that previously could only be tried by the Supreme Court. The State is divided into three proclaimed districts; Central Criminal Court District, Northern Criminal Court District, and the South Eastern Criminal Court District.

The jurisdiction of a District Criminal Court is exercisable by a District Criminal Court Judge sitting in open court, with or without a jury, or in chambers as the case may require. The Crown is represented in District Criminal Courts by the Attorney-General or by counsel appearing on his behalf. The other party may conduct his own case or may engage counsel on his behalf. A person who is not a practitioner of the Supreme Court entitled to practise cannot appear in a District Criminal Court on behalf of any party.

District Criminal Courts: Convictions, South Australia

The second of the second	Convicted				
Type of Offence -	1971	1972	1973	1974	
Offences against the person: Acts (except murder) causing death, injury or endangering life	15 148 18 7	23 164 13 3	67 101 11 3	63 84 5 13	
Total	188	203	182	165	
Offences against property: Breaking and entering and burglary Embezzlement and stealing by servants Fraud and false pretences Other offences against property	434 15 16 33	474 13 16 67	445 6 36 65	358 18 30 76	
Total	498	570	552	482	
Offences against good order	11 42	38 48	46 60	39 78	
Total (all offences)	739	859	840	764	

Appeals against verdicts and sentences of District Criminal Courts are to the Full Court.

Pursuant to Section 321 of the Act the Senior Judge and two other judges may make rules of court for carrying into effect the district criminal court provisions of the Act.

## COURTS OF SUMMARY JURISDICTION

Courts of Summary Jurisdiction are held in all major towns to hear criminal cases. In offences of dishonesty their jurisdiction is in most instances confined to cases where the property value is not more than \$400, and the limit of their jurisdiction as to penalty is imprisonment for two years. Their procedure is regulated by the Justices Act, 1921-1975. They are presided over, either by a special magistrate, a special justice or by two justices of the peace, with the more serious causes generally being heard by a special magistrate.

Special magistrates are appointed under the Justices Act and the Local Courts Act, and each appointment must be approved by the Chief Justice. Generally appointees are required to be practitioners of the Supreme Court who have been practising for some years.

Courts of Summary Jurisdiction (Magistrates Courts), Persons Convicted

South Australia(a)

Offence	1970-71	1971-72	1972-73	1973-74
Against the person	569	697	584	718
Against property:				
Burglary and housebreaking	10	48	22	1
Larceny (various)	1 912	1 906	1 865	1 996
Other	1 738	1 546	1 381	1 254
Against morality	273	288	185	167
Against good order:				
Drug offences	69	121	116	150
Drunkenness	9 185	9 975	8 314	7 973
Unlawfully on premises	420	348	307	258
Vagrancy	594	520	308	200
Other	2 774	2 930	2 092	2 200
Other, relating to:				
Road Traffic and Motor Vehicles Acts	63 742	71 255	59 303	57 518
Licensing Act	838	661	495	250
Community Welfare Act	1 206	1 063	1 267	1 52
Police Offences Act	1 518	1 295	1 055	1 020
Local Government Act	4 952	5 679	5 293	5 620
Broadcasting and Television Act	2 648	2 883	2 250	2 91
Income Tax Assessment Act	1 653	2 637	1 452	1 59
Other	5 914	8 364	7 779	7 67:
Total persons convicted:				
Males	91 076	101 323	84 143	81 813
Females	8 939	10 893	9 925	11 22
Total	100 015	112 216	94 068	93 03

<sup>(</sup>a) Excludes juveniles. Where multiple charges have been laid against one individual at the same time each type of offence has been counted separately.

Offences under the Road Traffic and Motor Vehicles Act accounted for 62 per cent of total convictions in 1973-74—this compares with 50 per cent in 1963-64 and 40 per cent in 1953-54.

## JUVENILE COURTS

Proceedings in juvenile courts are regulated by the Juvenile Courts Act, 1971-1974 which came into force on 1 July 1972. The Senior Judge appointed under this Act exercises administrative control over juvenile courts throughout the State.

Juvenile courts may be presided over by a judge, a special magistrate or, in certain circumstances, two justices of the peace who have been approved as suitable to exercise this jurisdiction. The courts, if constituted of a judge or a special magistrate may try any offence (except homicide) committed by a juvenile. Limitations are placed on the jurisdiction of two justices of the peace.

Juvenile Offenders: Offences Proved in Juvenile Courts and Aid Panels South Australia (a)

Tong of Office	Juvenile	Courts	Juvenile Aid Panels		
Type of Offence -	1973-74	1974-75	1973-74	1974-75	
Homicide	. 2	6		_	
Assault	201	233	33	54	
Robbery	32	39	5	i	
Rape	7	7	- <u>-</u>		
Other heterosexual offences	71	68	21	8	
Breaking and entering	1 237	1 327	563	612	
/ehicle theft	1 016	1 015	166	168	
Other theft	1 226	1 417	1 459	2 499	
Vilful damage	218	302	176	271	
Receiving	98	104	71	155	
raud	294	214	48	81	
Orug offences	61	82	7	4	
Oriving and traffic (b)	601	805	412	615	
iquor	406	466	39	69	
Julawfully on premises	148	137	109	119	
ndecent behaviour	141	95	19	28	
Orunk, disorderly	394	641	86	121	
Other	690	709	207	311	
Total offences	6 843	7 667	3 421	5 116	
Male	6 091	6 875	2 725	3 642	
Female	752	792	696	1 474	
Individual offenders:					
Male	2 512	2 898	1 672	2 300	
Female	444	460	529	1 089	

<sup>(</sup>a) Under 18 years. Excludes truants and children found to be neglected, destitute or uncontrolled.

<sup>(</sup>b) Excludes most minor traffic offences.

Juvenile offenders appearing before courts are classified into two basic groups according to the age of the child. Children under sixteen years are charged with being in need of care and control as a consequence of an alleged offence. When dealing with children in this group the court may discharge the child, release the child on a bond with or without supervision, or place the child under the care and control of the Minister of Community Welfare with or without an order committing the child to an institution. A child under sixteen cannot be convicted of an offence. Children over sixteen may be charged with an offence and dealt with as above with or without conviction; in addition the Act provides that a fine may be imposed and compensation or restitution may be ordered. Juvenile courts also exercise jurisdiction over truants, neglected children and uncontrolled children.

In most cases when a child under sixteen years is alleged to have committed an offence, the matter is referred to a non-judicial body called a juvenile aid panel for consideration. Difficult cases may be referred by the panels to the juvenile courts. For further details see Part 6.6, page 308.

#### THE LICENSING COURT

The licensing of hotels and the issue of liquor licences and permits is governed by the Licensing Act, 1967-1976 under which is constituted a Licensing Court consisting of a Chairman (who has the rank and title of Judge), a Deputy Chairman, and a panel of Licensing Magistrates.

The more important work of the Court, for example, the granting of new licences and the forfeiture and removal of licences, can only be carried out by a Full Bench of three, one of whom must be the Chairman or Deputy Chairman. All other matters may be dealt with by any member of the Court sitting alone.

The classes of licences that may be granted are:

(a) Full publican's licence.

(b) Limited publican's licence.

(c) Wholesale storekeeper's licence.

(d) Retail storekeeper's licence.

(e) Wine licence.

(f) Brewer's Australian ale licence.

(g) Distiller's storekeeper's licence.

(h) Vigneron's licence.

(i) Club licence.

(i) Packet licence.

(k) Railway licence.

(1) Restaurant licence.

(m) Cabaret licence.

(n) Theatre licence.

(o) Special licence.

(p) Twenty litre licence.

(q) Hotel broker's licence.

The demands and interests of tourism have been met by legislation to provide for the granting of special licences to National Pleasure Resorts and Parks, festivals of historic, traditional or cultural significance, the Adelaide Festival Theatre and the Adelaide Festival of Arts. New wine licences can only be granted to genuine museums or art galleries situated in, or close to, areas in the State where wine is produced. A special class of hotels has been created, to be known as *Tourist Hotels*, and these must be so designated by the Minister of Tourism. Holders of both full and limited publican's licences, restaurant or wine

licences may apply to the Court for an outdoors permit under which they can provide food and liquor in open-air and street-side areas outside the licensed premises.

The following table shows the number of licences and permits issued during the years ended 30 June 1971 to 1975.

Liquor Licences and Permits, South Australia

Licence or Permit -	Year ended 30 June					
Licence of Permit -	1971	1972	1973	1974	1975	
Licence:						
Publican's;						
Full	598	598	600	601	602	
Limited	37	40	44	48	55	
Storekeeper's (a)	169	171	174	180	183	
Vigneron's	44	47	55	61	67	
Club	73	93	133	159	177	
Restaurant	88	106	121	137	151	
Permits:						
Special licensed premises	6 209	7 049	6 730	6 673	5 634	
Special unlicensed premises	15 286	15 282	15 652	16 953	17 071	
D41-	7 330	6 998	7 653	7 877	7 466	
C1 1						
Club	2 001	1 737	1 888	2 097	2 036	
Other	345	344	521	914	744	

<sup>(</sup>a) Covers wholesale, retail and distillers.

Fees for licences are paid in accordance with the amount of liquor purchased (or in some cases sold) during the preceding twelve months and at present, in the case of the retail licences, is calculated at 8 per cent of the amount of purchases.

In December 1974, legislation was enacted to authorise discretionary hotel bar trading hours from 5 a.m. to 10 p.m. Monday to Thursday and 5 a.m. to 12 midnight Friday and Saturday, and to fix obligatory trading hours, Monday to Saturday from 11 a.m. to 10 p.m., or some other continuous period of not less than eleven hours fixed by the Court. Before this trading hours were generally from 9 a.m. to 10 p.m.

In the case of a full publican's, limited publican's and restaurant licence, liquor may be sold and disposed of in the dining area each weekday from 12 noon to 1.30 a.m. on the following morning and on Sundays between 12 noon and 10.45 p.m. by diners with an additional thirty minutes within which the liquor may be consumed. Similar provisions apply to wine licences where substantial food is served. Approval may be granted to *Tourist Hotels* to sell and dispose of liquor for consumption from 9 a.m. to 3 a.m. on the following morning.

The Court may upon the granting or renewal of a full publican's licence, having regard to the needs of the public, exempt the holder of the licence from the obligation to supply lodging.

Permits may be granted under certain circumstances to extend the trading hours of licensed premises and to allow the sale, supply or consumption of liquor in unlicensed premises. Permits may be granted to clubs, for periods of up to one year, for the sale and supply to members for consumption on club premises—at 30 June 1975, 758 of these permits were current and in addition 1 278 permits were issued for separate club functions during the year. Clubs whose takings from the sale of liquor exceed \$25 000 in any one year are not eligible for a permit but are required to apply for a Club Licence.

# **BANKRUPTCY**

Since 1928 bankruptcy has been under Australian Government jurisdiction. Under the Bankruptcy Act 1966-1975 South Australia is a bankruptcy 'district' and jurisdiction is exercised through the Court of Insolvency of the State of South Australia exercising Australian Government jurisdiction in bankruptcy.

Bankruptcies: Number, Liabilities, Assets, South Australia

Year	for	Administr	control of the contro			Total Debtors	
	Number	Assets	Liabilities	Number	Assets	Liabilities	Number
		\$	\$		\$	\$	
1970-71	611	2 579 476	4 211 801	15	293 317	437 190	626
1971-72	622	1 884 312	3 695 896	21	728 755	938 616	643
1972-73	528	1 176 909	2 821 609	26	212 981	498 022	554
1973-74	358	1 049 624	2 036 653	15	375 849	433 540	373
1974-75	427	1 580 680	3 304 232	10	718 437	805 578	437

A debt of at least \$500 is necessary before a creditor may commence bankruptcy proceedings. Preferential creditors include employees for amounts owing in respect of wages and salaries, worker's compensation, long service leave, annual leave, recreation leave or sick leave, and the Commissioner of Taxation for unpaid tax on one year's income.

A bankrupt who has not previously been discharged is automatically discharged after five years unless an objection is filed with the Registrar in Bankruptcy.

#### JURY SYSTEM

The procedure in relation to juries is governed by the Juries Act, 1927-1975.

Indictable offences are tried before a Judge and twelve jurors sitting in the criminal jurisdiction of either the Supreme Court or District Court, depending on the gravity of the offence.

Jury districts for the metropolitan and certain country areas are fixed by proclamation pursuant to the Juries Act and consist of a number of subdivisions of the House of Assembly electoral districts. Legislation passed in 1965 provided

for women to serve on juries as well as men, and, with certain exceptions, all persons over the age of twenty-five and under sixty-five who are enrolled as House of Assembly electors within the proclaimed jury districts are qualified and liable to serve as jurors.

Persons exempted from liability to serve are listed in the third schedule to the Act and include judges, Members of Parliament, certain public officers, members of the defence forces, clergymen, legal practitioners, magistrates, university professors, police officers, doctors, dentists, pharmacists, opticians, physiotherapists, veterinary surgeons, newspaper editors and school teachers. Women automatically exempted include nurses, and the wives of judges, magistrates and police officers, but any other woman may also cancel her liability for jury service by giving notice to the Sheriff to that effect within six days after receipt of a jury summons.

A jury list is compiled annually for each jury district. The names of persons included in the list are selected by computer process from the appropriate electoral rolls at the direction of the Sheriff. The jurors summoned to hear and determine an issue are later selected by ballot. Accused persons and the Crown each have the right to challenge three jurors without assigning reasons. About 1000 persons serve on juries each year in South Australia.

#### STATE INDUSTRIAL TRIBUNALS

Industrial arbitration in South Australia was inaugurated in 1894 by the establishment of Boards of Conciliation. Since then the system has undergone fundamental changes from time to time and the present basis is the Industrial Code, 1967-1972, under which the Industrial Court, Industrial Commission, Conciliation Committees and Commissioners have been established. For details on the composition of these bodies and their functions see Part 7.2.

# LEGAL ASSISTANCE SCHEME

The Legal Assistance Scheme, administered by the Law Society of South Australia Incorporated, has been operating since 1933. This voluntary Scheme which has legislative recognition in the Legal Practitioners Act, 1936-1972, is supported by the legal profession and is designed to ensure that no person who is deserving of legal assistance shall be deprived of it by lack of finance.

The South Australian Government makes an annual grant to the Law Society to assist in the administration of the Scheme and, since 1960, the Government has made special annual grants to partially recompense legal practitioners acting in assigned cases. On 1 July 1970 the Legal Practitioners Trust Account was instituted and from that date further financial assistance to the Law Society and legal practitioners acting in assigned cases has been received from portion of the interest on this Trust Account.

In addition, the Law Society conducts an advisory service for preliminary advice at no cost to pensioners and students, and to others at a nominal charge.

Practitioners also attend on a voluntary basis at Magistrates Courts at Adelaide, Port Adelaide, Christies Beach, Berri, Whyalla, Mount Gambier, Naracoorte, Port Augusta, Port Pirie, Port Lincoln and Renmark to assist defendants appearing before the court to obtain adjournments, remands and legal assistance. General advice and guidance is given. No charge is made for this service.

#### PUBLIC TRUSTEE

The office of Public Trustee was established in 1881 and is now regulated by the Administration and Probate Act, 1919-1975. It provides a service to the public in the administration of estates and the protection of infants and absentee beneficiaries in estates administered by private administrators. A person may appoint the Public Trustee to be the executor and trustee of a will or as trustee of any disposition of property creating a trust.

The Public Trustee, where directed by the Court, becomes administrator of certain deceased estates; acts as guardian of certain infants; controls a protected person's property under the Aged and Infirm Persons' Property Act, 1940-1975; and receives, invests and distributes for the benefit of widows and minor dependants, amounts awarded under the Workmen's Compensation Act, 1971-1974.

Under the Mental Health Act, 1935-1974 the Public Trustee has control of the estates of some of the patients who have been admitted to Government mental hospitals, and may be appointed to act for the estate of any person found to be of unsound mind.

## THE SOUTH AUSTRALIAN POLICE FORCE

A police force was first established in South Australia in 1838 and has been administered by a Commissioner of Police since 1840. The number of Police officers rose steadily from 127 in 1851 to a peak of 802 in 1929, fell to 674 in 1943 and has since risen steadily to 2 461 in 1975. The number of persons per police officer has fallen from 910 in 1943 to 502 in 1975.

The maintenance of law and order and the reduction of opportunities for criminal activity are the main functions of the Uniformed Branches. At 30 June 1975, there were forty-three metropolitan regional and 112 country Police Stations and offices. Women police officers have equal opportunities and carry out the same duties as male officers.

# Police Personnel, South Australia (a) At 30 June

Personnel	1971	1972	1973	1974	1975
Commissioned officers Non-commissioned officers Constables	58 445 1 468	61 501 1 501	69 522 1 576	81 566 1 617	89 640 1 732
Total active police force	1 971	2 063	2 167	2 264	2 461
Persons per active member	595	575	553	537	502

<sup>(</sup>a) Active police force strength. Excludes trainees and cadets, women police auxiliaries, civil staff, etc.

The Traffic Region, while policing the general regulations relating to road use and control of traffic, also aims at improving road safety by ensuring the safe and efficient flow of traffic, by testing vehicles for roadworthiness, lecturing on road courtesy and safety, visiting schools in conjunction with an educational program and conducting driving tests for licence applicants.

In Adelaide, the Criminal Investigation Branch has been reorganised. The Headquarters staff has been progressively reduced in line with the concept of a compact specialist unit responsible for the investigation of major crimes, or crimes requiring an unusual expertise. To ensure that the activities of enlarged suburban units are co-ordinated, a Crime Intelligence Unit has been established at Headquarters to study crime trends. The Crime Director is responsible for recommending the allocation of additional resources to any units requiring assistance. Country areas are served by detectives based at selected centres. Auxiliary services provided by the Modus Operandi, Records, Fingerprints, Photographic, Documents, Ballistics, Crime Scene and Laboratory sections are essential aids in criminal investigation.

In 1959, a Police Emergency Operations Group consisting of Cliff Rescue, Underwater Recovery, Sea Rescue and Emergency Squads, was constituted under the direction of a Superintendent who is appointed also the Police Co-ordinator of Emergency Planning.

The Commissioner of Police is responsible for the Emergency Fire Services, operations of which are outlined on pages 184-5.

The changing police role in the community, together with continual changes in law and investigational techniques, has resulted in special emphasis being placed upon the training of all personnel within the Force. There are two levels of recruitment. Cadets are enrolled at seventeen years of age and are given a three-year course of academic and practical instruction before graduation to operational duties. Adults are enlisted between the ages of twenty and thirty years and are given twenty-two weeks instruction and then serve a probationary period on general duties before being permanently appointed. All personnel are required to undergo refresher training at selected intervals of service. In addition, courses are regularly conducted for such specialist appointments as prosecutors, detectives, technicians, drivers and instructors. Commissioned officer and non-commissioned officer training, in addition to external tertiary studies, are provided. At 30 June 1975, there were 405 cadets in training, and during the year forty-nine male and eleven female adult recruits graduated. Formal instruction was given to 461 members in refresher or specialist courses.

In 1971 the use of light aircraft was instituted by the Department for the transport of personnel and prisoners throughout the State. A twin-engined aircraft is now used giving an increase in speed and payload.

An extensive re-organisation of general police in the metropolitan area was begun early in 1973. This involved the division of metropolitan Adelaide into three territorial regions, each commanded by a Chief Superintendent, the implementation of a sector system in regions and the restructuring of patrol areas designed to give emphasis to personal contact between the patrol force and the public. Advanced VHF/UHF interface repeater radio equipment between car and constable has been introduced to make foot patrolling more effective.

Other innovations introduced are a crime prevention unit, a criminal intelligence centre and regional crime collators. A tactical reserve designated as a 'task force' has been formed under the command of the Metropolitan Senior Chief Superintendent to co-ordinate the activities of the metropolitan regions. Members of the

task force receive special training to deal with extraordinary emergencies and provide supplementary assistance at special events.

The Police Community Affairs and Information Service was formed in 1973 to foster better relations between the police and the general public. In May 1975 the first Police 'Open Day' was conducted at the Police Academy with action and static displays by various sections of the Department. Approximately 30 000 people were in attendance.

Early in 1974, a Dog Squad, comprising six handlers and six dogs became operational. As well as carrying out foot and mobile patrol duties, the squad is used in tracking and drug searches.

The following table gives details of the revenue and expenditure of the South Australian Police Force in recent years.

South Australian Police Force, Revenue and Expenditure(a)

Voor	]	Expenditure	3	Darramus	Net C	ost
Year	Wages and Salaries	Other	Total	Revenue -	Total	Per Head
			D	ollars		
1970-71	. 10 218 913	2 161 493	12 380 406	199 630	12 180 776	10.43
1971-72	. 11 947 148	2 354 245	14 301 393	1 339 915	12 961 478	10.95
1972-73	. 14 172 215	2 412 472	16 584 687	1 477 843	15 106 844	12.64
1973-74	. 18 131 664	2 840 914	20 972 578	1 638 929	19 333 649	15.97
	. 26 449 889		30 241 299	(b)2 206 690	28 034 609	22.72

<sup>(</sup>a) As reflected in Consolidated Revenue Account only—capital expenditure is met from Loan Fund.

#### CORRECTIONAL SERVICES

There were eight gaols and prisons and nine police prisons administered by the South Australian Department of Correctional Services during 1974-75. Adelaide Gaol is a holding centre for remand and short-term sentenced prisoners. Yatala Labour Prison, South Australia's largest prison, provides for long-term male prisoners under maximum, medium and minimum security ratings. Yatala is the Northfield Security Hospital which was officially opened in November 1973, to accommodate criminal mental defectives. This modern hospital is staffed by trained medical personnel and provides specialised treatment programs for both males and females. Port Augusta Gaol, Port Lincoln Prison and Mount Gambier Gaol are medium security prisons which accommodate male and female prisoners. Gladstone Prison, which had been operating as a medium security prison for males, was phased out of use and closed at the end of 1975. Cadell Training Centre on the River Murray is a dual purpose institution which operates as a pre-release centre for long-term prisoners as well as accommodating medium security short-term prisoners. The Women's Rehabilitation Centre at Northfield is a multi-purpose prison for females from all parts of the State. The nine police prisons serve as short-term detention centres for both males and females, and are mainly situated in the more remote country areas.

<sup>(</sup>b) Includes \$1 593 000 recouped from Highways Fund for traffic and road safety purposes which became payable under an amendment to the Highways Act from 1 July 1971.

In common with other States and countries the emphasis in South Australian prisons is on rehabilitation. Industrial and trade training in various fields is available throughout the institutions, enabling prisoners to be prepared for ultimate outside employment. A wide range of correspondence courses are available through the colleges of advanced education and the South Australian College of External Studies under the supervision of the prison education officers. Special migrant and remedial classes are also conducted by the Education Division of the Department. A classification committee ensures that prisoners serving long-term sentences are correctly assessed for education, employment, social and other training purposes. In a wide range of matters affecting the well-being and after-care of prisoners and their families, the prison administration is assisted by chaplains, the Prisoners Aid Association, the Salvation Army and other voluntary organisations. Community services rendered by prisoners include the provision of emergency fire service units and the production of soft toys for children's homes.

The Probation and Parole Branch continues to expand, both in staff numbers and in the decentralisation of services. District offices are located at Port Adelaide, Elizabeth, Gilles Plains, Christies Beach and Glenelg in the metropolitan area and at Cadell, Gladstone, Whyalla, Port Lincoln and Mount Gambier in the country. The Branch is responsible for providing supervision and social casework services to probationers and parolees. Social work graduates are providing a more professional social work service, including a wider range of treatment and management alternatives for offenders. Provision of pre-sentence social reports to the courts remains one of the major functions of the Branch.

#### Gaols and Prisons, South Australia

Year		Total Accommodation for Prisoners		Received Sentence (a)	Prisoners under	in Gaol Sentence (b)	
···		·- <u>-</u>	TOT Trisoriers	Males	Females	Males	Females
1970-71 1971-72 1972-73 1973-74 1974-75			1 414 1 497 1 493 1 482 (c)1 417	6 871 6 952 7 323 7 028 6 899	694 758 560 574 637	818 795 654 735 705	38 29 25 30 13

<sup>(</sup>a) Counted once each time received.

# **PUBLIC SAFETY**

#### FIRE SERVICES

# The Fire Brigades Board

Provision for the establishment and maintenance of fire brigades in South Australia under the control and management of the Fire Brigades Board was first instituted in 1882.

<sup>(</sup>b) At 30 June.

<sup>(</sup>c) Decrease because of closure of Gladstone Prison.

In accordance with its general duty of extinguishing fires and protecting life and property in case of fire, the Board maintains suitably equipped fire brigades in proclaimed fire districts in the Adelaide Metropolitan Area and in country towns. At 30 June 1975 there were thirty-nine fire brigade stations of which seventeen were metropolitan and twenty-two were country. During the year 1974-75 these brigades received 5 703 calls of which 508 were false and malicious calls. Some of these brigades are manned by permanent personnel and others by auxiliary firemen, there being at 30 June 1975, 501 officers and firemen and 119 auxiliary firemen.

In addition to its main function, the Board provides a service section for the regular maintenance of private fire equipment installed in public and private premises, and makes its officers available for inspection of premises and for advice on fire protection generally, as well as to demonstrate the use and handling of various types of first-aid fire equipment.

The Fire Brigades Act, 1936-1975 provides that the expenses and maintenance of brigades be defrayed in the proportion of one-eighth by the State Treasury; three-quarters by insurance companies; and one-eighth by the municipalities and district councils concerned.

The total revenue for the year 1974-75 was \$6 050 000 made up as follows; insurance companies \$4 537 500; municipalities and district councils \$756 250; and Treasury \$756 250.

# South Australian Emergency Fire Services

The South Australian Emergency Fire Services was formed as a branch of Civil Defence during the 1939-45 War. When Civil Defence was disbanded, redundant trailer pumps were issued to local governing bodies by the State Government and the Emergency Fire Service (EFS) was developed into a volunteer country fire service, to protect those areas outside the districts covered under the Fire Brigades Act, 1936-1975. The responsibility and authority for fire prevention and control in these outer areas are vested in local government by the Bush Fires Act, 1960-1972 and Local Government Act, 1934-1975.

South Australian Emergency Fire Services

1972	1973	1974	1975
437	438	441	445
9 000	9 000	9 000	9 500
328	256	280	282
	755	657	1 317
30 268	15 040	53 081	3 053 443
	Do	llars	
500 141	387 892	3 069 192	791 446
50 611	96 080	133 515	1 258 906
	328 1 204 30 268 500 141	437 438 9 000 9 000 328 256 1 204 755 30 268 15 040 Dc 500 141 387 892	328 256 280 1 204 755 657 30 268 15 040 53 081 Dollars 500 141 387 892 3 069 192

EFS Headquarters, a branch of the Police Department, functions as a co-ordinating centre. The Director of Emergency Fire Services, responsible to the Commissioner of Police, advises on fire protection problems, conducts competitions and training programs, and co-ordinates fire-fighters and auxiliaries in major fire control. Fire equipment purchased by EFS organisations and councils is subsidised by the Bush Fires Equipment Subsidies Fund (equal contributions by the State Government and by fire insurers), and government subsidies are provided for maintenance.

The outstanding feature of the 1974-75 summer affecting the Emergency Fire Service was the unprecedented fire activity in the pastoral areas of the State. The area affected by bushfires rose from 53 081 hectares in 1974 to a record 3 053 443 hectares in 1975 as a result of two seasons of exceptional rainfall and seasonal thunderstorm activity producing prolific growth.

#### LIFE SAVING

# The Royal Life Saving Society-Australia

The South Australia Branch of the Royal Life Saving Society—Australia was established in 1909 and the formation of clubs at various beaches followed. In 1952 an agreement was made with the Surf Life Saving Association whereby this body undertook responsibility for life saving on ocean beaches, the Royal Life Saving Society retaining responsibility in all other areas of activity.

In South Australia the Society has developed into a large teaching body administered by a Council, giving instruction to schools and other interested bodies in the various methods of life saving, including the current methods of artificial respiration. This is done by honorary instructors and examiners. It also conducts lifesaving patrols (water and beach) at the West Lakes waterway on weekends and public holidays during the warmer months. In the winter months the emphasis is on talks and demonstrations on resuscitation, but during the swimming season weekly life saving instruction and examination, and life saving demonstrations are conducted throughout the State. Awards totalling 22 038 were issued to candidates who passed the various examinations in the 1974-75 season.

The honorary work of the Society is financed mainly by grants made by the Australian and the State Governments, and by donations.

#### The Surf Life Saving Association

The South Australian State Centre of the Surf Life Saving Association of Australia was formed in 1952, with the co-operation of the South Australian Branch of the Royal Life Saving Society and the Surf Life Saving Association of Australia.

The Henley, Glenelg and Moana Life Saving Clubs formed the nucleus of this body, which has eighteen affiliated clubs situated at Semaphore, Grange, Henley, West Beach, Glenelg, Somerton, Brighton, Seacliff, Christies Beach, Port Noarlunga, Southport, Moana, Chiton Rocks, Port Elliot, Whyalla, Taperoo Beach, Hallett Cove and Port Lincoln.

Voluntary members give many hours to patrolling their respective beaches each weekend and public holiday from the beginning of November until the end of March. At 30 June 1975 there were 1 273 members in Association clubs. From

1952 to the end of the 1974-75 season 1 859 rescues were performed with no loss of life on patrolled South Australian beaches while patrols were maintained by club members. During this same period many hundreds of persons received first-aid treatment.

The South Australian State Centre receives an annual grant from the State Government and individual clubs have been assisted with subsidies when building their club houses.

## 'Learn to Swim' Campaign

Vacation swimming classes organised by the Education Department were first established on an extensive scale in January 1956. Thirty-six country and fourteen metropolitan swimming centres were set up and over 7 000 children enrolled for instruction. The January 'Learn to Swim' campaign has been continued in each subsequent year and has grown steadily; in the summer vacation of 1974-75, 123 country and 74 metropolitan swimming centres were used, and the total student enrolment was approximately 40 000. Instruction is provided over a period of ten days by qualified swimming instructors. Instruction in Surf Life Saving was offered for the first time in 1972 at eleven metropolitan and four country beaches.

Swimming classes have also been conducted in school time since October 1954. 43 000 and 62 000 children were enrolled in these classes in the first and third terms of 1975 respectively.

Although swimming is still a major part of the program, the Education Department has introduced a number of water safety skills into the 'Learn to Swim' campaign. All instructors are trained to teach water safety, life saving and swimming by the most up-to-date methods available.

## INDUSTRIAL ACCIDENT PREVENTION

The post-war growth of industrial activity in this State was accompanied by an increasing toll of injuries and fatalities sustained during the course of employment. Legislation requires certain minimum standards of safety in working conditions to be provided in various industries, and inspections are made to ensure compliance with legislative requirements. However, legislation and inspection are not the only means of minimising industrial accidents and in the late 1950s the South Australian Government implemented a program of education for management, supervisors and employees in accident prevention measures, with the object of making all sections of industry more 'safety conscious'.

Safety officers employed in the Department of Labour and Industry conduct safety training courses, present lectures, screen films and distribute industrial safety pamphlets produced within the Department.

In addition the Safety Engineering Society of Australasia, the Australian Institute of Management (Adelaide Division), the South Australian Institute of Technology and the Department of Employment and Industrial Relations make valuable contributions within their particular spheres of activities to the promotion of industrial safety.

## NATIONAL SAFETY COUNCIL OF AUSTRALIA SA DIVISION

The National Safety Council of Australia SA Division was formed in 1963 as the Industrial Accident Prevention Society of SA Inc., a voluntary non-profit educational body. It is an autonomous branch of the largest organisation in

Australia devoting its entire resources to the reduction of accidents in most areas of the community. In South Australia the Council's efforts are largely devoted to occupational, child and home, and water safety problems; traffic safety being the function of the Road Safety Council of South Australia. The SA Division is also responsible for servicing the requirements of members in the Northern Territory and regular visits are made to that area for safety training and promotional purposes.

The aims of the Council are carried out by the provision of safety consultant services, lectures, training courses and the distribution of safety publications and materials. Finance is derived from membership fees, services, an annual grant from the State Government and assistance from the Australian Government. The Council's activities are controlled by a body representative of all spheres of community interest.

## ROAD SAFETY COUNCIL OF SOUTH AUSTRALIA

The Road Safety Council of South Australia was formed in December 1965. The Council appointed by State Cabinet consists of an independent chairman and nine members representing the National Council of Women, the Road Traffic Board, the Police Department, the Royal Automobile Association of South Australia, the Local Government Association, the Education Department, the South Australian Railways, the Trades and Labor Council of South Australia and the Australian Medical Association.

The objectives of the Council are to prevent road accidents involving death, injury or property damage through united action by all sections of the community, and to advise and assist government, semi-government and local authorities as well as private organisations in the adoption of precautionary measures in an attempt to prevent such accidents. In its efforts to achieve its objectives the Council concentrates on the education of road users in correct practices.

The Council is a section of the Department of Transport. Its administrative headquarters are at the Road Safety Instruction Centre at Oaklands Park. The facilities of the Centre include lecture rooms and instructional areas for children and licensed drivers of all classifications and all age groups. Appropriate courses in road safety education and driver re-education are conducted.

The Council operations are financed from the \$1 derived from each driver's licence fee under the Motor Vehicles Act, 1959-1975.

#### CONSUMER PROTECTION

Consumer protection in South Australia is largely the responsibility of the Commissioner for Prices and Consumer Affairs who is in charge of the Prices and Consumer Affairs Branch of the Attorney-General's Department. The activities of this Branch include the investigation of consumer complaints, research into consumer problems, consumer education and, under certain circumstances, the institution of legal proceedings on behalf of a consumer against another person or body, or the defence of a consumer in proceedings brought against him.

The following table gives details of complaints investigated by the South Australian Commissioner for Prices and Consumer Affairs during 1975.

# South Australian Prices and Consumer Affairs Branch Formal Complaints Investigated, 1975

Particulars	Number of Complaints	Percentage of Total
Second-hand Motor Vehicles Act: Used motor vehicles:		Per cent
Faulty	474	7.7
Misrepresentation of year of model	28	0.5
Other	24	0.4
Total motor vehicles	526	8.6
Door to door sales:		
Electrical and household appliances	32	0.5
Freezer food plans	6	0.1
Books and magazines	32	0.5
Other	40	0.7
Total door to door sales	110	1.8
Unfair advertising	338	5.5
Unordered goods and services	33	0.5
Consumer credit	217	3⋅5
Excessive charges for goods	321	5⋅2
Excessive charges for services	821	13-4
Faulty goods and services:		
Building work and allied trades	398	6.5
Electrical and household appliances	471	7.7
Furniture, floor coverings, household fittings	440	7.2
Motor trade	223	3.6
Other	656	10.7
Total faulty goods and services	2 188	35.7
Unfair dealing:	-	
Motor trade	285	4.7
Rental bonds	201	3.3
Other	993	16.2
Total unfair dealing	1 479	24·1
Miscellaneous complaints	96	1.6
Total complaints	6 129	100.0

Legislation giving the Commissioner the necessary powers to act on behalf of consumers is contained in several Acts of Parliament, the more important being the Prices Act, 1948-1975, the Door to Door Sales Act, 1971, the Book Purchasers

Protection Act, 1963-1972, the Unfair Advertising Act, 1970-1972, the Second-hand Motor Vehicles Act, 1971 and the Manufacturers' Warranties Act, 1975. The effect of each of these Acts was discussed in detail in a special article on consumer protection included on pages 167-71 of the South Australian Year Book 1973.

A further aspect of consumer protection was the introduction of the Consumer Transactions Act, 1972-1973 and the Consumer Credit Act, 1972-1973 which came into force on 1 November 1973. The effect of these two Acts is to give added protection to persons who enter into contracts for the purchase of goods or services up to the value of \$10 000. The provisions with regard to purchase on credit have been revised extensively and the consumer's right to goods and services of fair quality is assured.

# 6.2 EDUCATION

In South Australia attendance at school is compulsory for children from six to fifteen years of age. Children who are five years of age by the last day of February may be admitted to government schools on the first school day in February; children who are five years of age on or before 2 July may be admitted on the first Monday after the last Saturday in June of that year. The two-intake system is being progressively replaced over a four-year period from 1 July 1974, by a system which allows continuous admission of five-year-olds as soon as they reach their fifth birthday. In 1975, seventy-six (31·7 per cent) government metropolitan and 221 (65·8 per cent) government country schools had implemented this policy. Most non-government schools have the two-intake system and those with kindergartens integrated with the school accept children under five years of age.

Education at the primary and secondary level is available at government schools controlled by the Education Department and at non-government schools, most of which are denominational. Some non-government schools provide boarding facilities. In both government and non-government schools there has been a trend towards co-education in recent years. The term 'year' is used to denote class level in both primary and secondary schools. Primary classes are designated Year 1 through to Year 7, and secondary classes Year 8 to Year 12.

At the tertiary level the University of Adelaide, the Flinders University of South Australia and the colleges of advanced education are independently controlled but are financially dependent on government grants.

Facilities for adult education are provided by the Department of Further Education, the Workers Educational Association and the University of Adelaide.

South Australian schools celebrated the centenary of State education in October 1975. The present system of government schools and of compulsory education dates from the Education Act, 1875.

A historical summary of education in South Australia was included on pages 153-4 of the South Australian Year Book 1969.

#### PRE-SCHOOL EDUCATION

The kindergarten movement in South Australia was founded in 1905 and up to the end of the 1939-45 War kindergartens were primarily designed for the care and education of under-privileged children. Since 1946 they have become generally accepted as a phase of education, with a consequent rapid increase in facilities. Although some independent kindergartens are conducted by private individuals, or by non-government schools, the majority of pre-school education is under the supervision of the Kindergarten Union of South Australia. This organisation supervises 234 subsidised kindergartens situated throughout the State together with three mobile units. In 1975 the subsidised kindergartens had an enrolment of 13 125 children and employed 660 persons, 478 of whom were teaching staff.

While the supervision covers various aspects of organisation it is largely concerned with the educational program. As well as encouraging the creative, physical and mental development of four to five-year-old children the kindergarten prepares them for the experiences of formal schooling. Sessions are generally of two and a half to three hours duration each day with enrolments limited to thirty children a session; two sessions are held daily at most kindergartens. The work of kindergartens is now being expanded to a wider pattern of child care to encompass extended hours care, playgroups and resource facilities for the community.

The Kindergarten Union is a statutory body and receives its revenue from the Australian and South Australian Governments through the South Australian Childhood Services Council. This revenue covers teachers' salaries, capital building programs and most of the kindergartens' operating costs. Local committees are expected to raise a proportion of the day to day operating costs and, to a degree, provide some of the 'extras' needed. Such extra revenue generally comes from fund-raising activities.

The annual recurrent budget of the Kindergarten Union for the financial year to 30 June 1976 was \$6,000,000. Approximately \$300,000 was allocated for capital building work, providing for the construction of two new centres, one of which was a joint venture with the South Australian Department of Education. This capital amount also contributed to the completion of three other centres. During the financial year 1976-77 it is expected that approximately \$2,000,000 will be available for capital expansion.

The Education Department opened its first seven pre-schools between July and September 1974 and a further ten were operating by mid-1975. These were set up within the grounds of existing primary schools. The Department also operates twenty-six child-parent centres throughout the State as an integral part of existing junior primary and primary schools. These centres are alternative pre-school arrangements using the play group model as their basic structure. They tend to be linked with other community groups and are a service to families rather than individual pre-school children. The two child-parent resource centres at Alberton and Elizabeth West are used by child-parent centres in nearby schools.

In 1976 the Education Department, in a combined project with the Department for Community Welfare and Department of Public Health, opened three child-care centres at Brompton, Campbelltown and Nangwarry.

## GENERAL SCHOOL EDUCATION

The State Government, through the Education Department, provides free facilities for primary and secondary education; however, parents may choose between government and non-government schools. The Education Department functions under the Minister of Education. The permanent head of the Department is the Director-General of Education, assisted by two Deputy Directors-General of Education and Directors of Primary Education, Secondary Education, Educational Services and Resources, Research and Planning, and Administration and Finance. A Director of Further Education heads the Department of Further Education which is concerned with technical colleges and adult education.

The work of the schools is materially assisted by the school councils, and also by the mothers clubs, parents and friends associations and welfare clubs. For many years these bodies have been instrumental in raising large sums for the purchase of additional amenities for the schools.

In country areas many children are conveyed to government schools by free bus services provided by the Education Department. At the end of 1975 there were 692 bus services carrying an average of 25 216 students daily to 309 schools.

Although non-government primary schools largely follow the government schools in their curricula, the Education Department exercises no formal authority over these schools beyond requiring them to submit certain statistical returns relating to compulsory attendance. The similarity between courses in the government and non-government secondary schools is attributable to the influence of the Public Examinations Board of South Australia syllabus and the close liaison of the administration and teachers of both types of school.

The Catholic school system is organised on a State wide basis under the direction of the South Australian Commission for Catholic Schools. This Commission is comprised of the Catholic Archbishop of Adelaide, the Catholic Bishop of Port Pirie, priests, primary and secondary school principals, Superiors, parents, teachers (lay and religious), members of School Boards and regional members together with the Director of Catholic Education and the Co-ordinators of Primary and Secondary Education.

The State Government now pays a grant of \$10 a year for each primary and \$20 for each secondary student liable to pay fees at an approved non-government school. In 1976 additional payments on a needs basis varying from \$92 to \$107 a student were made to 128 schools catering for primary students and from \$140 to \$165 a student to forty-seven schools catering for secondary students.

#### **Schools**

Details of schools operating in South Australia in 1975 are given in the next table. The average size of government schools has increased rapidly since 1940 partly as a result of the consolidation of country schools. There were 619 government schools in 1975 compared with 1 043 in 1940 and 1 108 in the peak year of 1935. In 1940 there was an average of 73 students to each government school, with this figure increasing to 125 by 1950, 255 by 1960 and 379 by 1975. There has been a similar movement in the average size of non-government schools.

# Schools by Size, South Australia At 1 August 1975

Cturilinate on Doll				Non-						
Students on Roll					Primary	Primary- Secondary	Second- ary	Special (a)	Total	- govern- ment Schools
Under 21					25	_	<del>-</del>	2	27	2
21 to	35				35			8	43	9
36 to	100				105	4		21	130	22
101 to	200				44	10	6	3	63	50
201 to	300				26	14	8		48	19
301 to	400				30	11	10	1	52	16
401 to	600				75	7	21		103	17
601 to	800				50	4	16		70	10
801 to 1	000				29		11		40	6
1 001 to 1	200				10		15		25	
1 201 to 2	000				1		17	_	18	
7	[otal				430	50	104	35	619	151

<sup>(</sup>a) Schools for physically and mentally handicapped children, schools at institutions and schools for Aborigines.

#### Students

Enrolments in recent years, classified by government and non-government schools and by age of the students are given in the following tables.

Primary and Secondary Students, South Australia
At or about 1 August

A 00	At Gove	rnment Sch	ools (a)	At Non-government Schools			
Age —	1973	1974	1975	1973	1974	1975	
5	17 295 18 904 19 075 19 771 20 237 20 625 20 972 21 109 20 809 20 106 16 115 10 883 4 424 1 093 236	18 020 19 884 19 027 19 666 19 918 20 536 20 905 20 558 20 842 20 649 16 594 10 451 4 176 949 204	19 185 20 134 19 578 18 875 19 696 19 940 20 359 20 669 20 662 20 846 17 223 11 449 4 676 1 086 226	2 652 2 465 2 680 2 838 2 918 3 055 3 263 3 573 3 506 3 248 3 071 2 696 1 405 303 46	2 990 2 614 2 601 2 718 2 894 3 022 3 242 3 495 3 709 3 503 3 308 2 685 1 469 325 34	2 973 2 709 2 652 2 636 2 833 3 006 3 243 3 550 3 575 3 623 3 426 2 916 1 411 278	
20 and over	132	100	108	16	8	10	
Total	231 786	232 479	234 712	37 735	38 617	38 885	

<sup>(</sup>a) From 1974 excludes Northern Territory correspondence students, 317 in 1973.

# Primary and Secondary Students, South Australia At 1 August 1975

Age -		Governmen	t	No	- Total		
Agu	Primary	Secondary	Total	Primary	Secondary	Total	Students
5 and under . 6	19 185 20 134 19 578 18 875 19 696 19 940 20 327 12 140 1 421 194 125 130	32 8 529 19 241 20 652 17 098 11 319	19 185 20 134 19 578 18 875 19 696 19 940 20 359 20 669 20 662 20 846 17 223 11 449	2 973 2 709 2 652 2 636 2 833 3 006 3 225 1 840 160 13 5	18 1 710 3 415 3 610 3 421 2 905	2 973 2 709 2 652 2 636 2 833 3 006 3 243 3 550 3 575 3 623 3 426 2 916	22 158 22 843 22 230 21 511 22 529 22 946 23 602 24 219 24 237 24 469 20 649 14 365
17 18 19 20 and over Total	89 72 65 4 151 975	4 587 1 014 161 104 82 737	4 676 1 086 226 108 234 712	22 067	1 408 277 44 10 16 818	1 411 278 44 10 38 885	6 087 1 364 270 118 273 597

## **Teachers**

The numbers of teachers employed in primary and secondary schools in recent years are shown in the following table.

# Teachers, South Australia

	G	Government Schools				Non-government Schools			
At or about	Full-time		Part-time (a)		Full-time		Part-time (a)		
1 August	Males	Females	Males	Females	Males	Females	Males	Females	
1973	4 837 5 148 5 274	6 252 6 764 7 108	59 67 59	458 510 516	573 589 635	998 962 983	30 51 45	176 217 237	
Type of School 1975 Primary Prim-Secondary Special (b)	1 540 471 3 181 82	4 230 467 2 241 170	3 3 54	160 44 303 9	78 430 126 1	500 344 114 25	3 33 9	49 151 33 4	

<sup>(</sup>a) Equivalent full-time units of part-time teaching. Total part-time teachers at 1 August 1975, government schools, 83 males and 930 females; non-government schools, 111 males and 505 females.

<sup>(</sup>b) Includes schools for physically and mentally handicapped children, schools at institutions and schools for Aborigines.

#### PRIMARY EDUCATION

Children normally begin their schooling at the age of five years when they enrol for primary education at either a government or non-government school. Primary education involves a seven year course.

## GOVERNMENT SCHOOLS

Metropolitan children attend primary schools while country children normally attend a primary, rural, area or special rural school, although those in remote areas may receive lessons by correspondence. The table which follows shows the numbers of schools and students in the primary division in recent years.

Primary	Education:	Government	Schools.	South	Australia

At	Numl	ber of	Primary Students				
or about	Scho	ools	Enrolled				
1 August	Primary (a)	Area (b)	Primary Schools (a)	Area Schools (b)	Correspondence School (c)	Other (d)	Total
1971	450	51	144 075	9 716	682	1 985	156 458
	433	50	142 795	9 411	654	2 026	154 886
	429	50	140 567	9 108	675	2 348	152 698
	426	49	141 009	9 010	480	2 402	152 901
	430	49	139 912	9 131	493	2 439	151 975

- (a) Includes rural schools.
- (b) Includes also special rural schools.
- (c) From 1974 Northern Territory students are excluded.
- (d) Includes schools for Aborigines, schools for handicapped children and schools at institutions.

## **Primary**

In the first two years of school the emphasis is on the child's active involvement in learning. The curriculum is designed to extend children's experience of their environment, through social studies, science and mathematics. It provides for the development of language skills, especially fluency in speech and reading, and creative activities in movement, music, art, drama and writing.

The primary school curricula provide a general framework for the study of English, mathematics, social studies, science, music, art and craft and physical education. An increasing provision is being made for the study of elective subjects, such as foreign languages, ballet and instrumental music.

Ancillary services and expert advice are provided for primary schools by the Supervisors of School Libraries, Physical Education, Music and Educational Technology and their staffs. There are also consultants in all the basic subjects who visit the schools and conduct in-service courses.

## Area and Special Rural

These schools, situated in country centres, cater for both primary and secondary students. The primary course is similar to that of the primary schools but the secondary courses offered are restricted by the availability of staff.

# Correspondence

The Correspondence School was started in 1920 to cater for children unable to attend ordinary schools. Most of these children live in remote parts of South Australia although there are others who cannot attend school because of invalidity. Connected with the Correspondence School is the School of the Air at Port Augusta which provides two-way radio communication between teacher and student to supplement the correspondence lessons.

# NON-GOVERNMENT SCHOOLS

At 1 August 1975, 22 067 children were receiving primary education at non-government schools. The majority of these children were attending Catholic schools (see table on pages 199-200).

#### Catholic

Many children receiving primary education in the Catholic school system attend parish schools while the remainder attend colleges conducted by religious orders. Both types of school are supported by fees paid by parents and by State and Australian Government grants. Parish schools are the property of the parishes which are responsible for equipping and maintaining them. The educational program of the school is under the direction of the principal who may be either a lay person or a member of a religious order. Elected school boards assist in the financial administration of these schools and determine the fees that will be charged as well as concessions for parents in necessitous circumstances.

#### Other

The Church of England, the Lutheran Church and the Seventh Day Adventist Church conduct primary schools. Primary education is provided together with secondary education at primary/secondary schools conducted by the Church of England, the Methodist Church, and the Presbyterian Church, and at three non-denominational schools.

#### SCHOOLS FOR HANDICAPPED CHILDREN

The Education Department, through the Guidance and Special Education Branch, makes provision for children with intellectual and physical disabilities. The Guidance and Special Education Branch provides supporting services to schools and parents with slow-learning or problem children, many of whom are helped in special small or opportunity or remedial classes in primary or secondary schools. There are seventeen special schools in metropolitan and country areas which cater for mentally retarded children between the ages of five and twenty years. These schools include those conducted at Minda Home and the Strathmont Centre.

Other special schools cater for children with visual, hearing and physical handicaps (including cerebral palsy); there are special classes for children with speech and hearing defects, and there are schools within the institutions of the Department for Community Welfare. A number of private agencies also provide educational facilities for handicapped children.

## SECONDARY EDUCATION

Children who have completed their primary schooling are required by law to attend a secondary school, either government or non-government, until their fifteenth birthday.

## GOVERNMENT SCHOOLS

The South Australian Education Department's policy is to provide comprehensive co-educational high schools which, consistent with their size and enrolment, offer the widest range of courses possible in an endeavour to meet the interests of the students.

Metropolitan students are required to attend schools within the zone in which they reside. The few schools that are not co-educational as well as Urrbrae Agricultural High School are unzoned at present. In the country, secondary education is provided by high schools in the larger towns, and by either high, area or special rural schools in many of the smaller centres. Certain students may use the facilities of the Correspondence School.

All new schools built in recent years, and some existing schools, have been provided with gymnasiums and music and drama areas. The upgrading of schools and the provision of open-plan units in existing schools is continuing.

## Secondary Education: Government Schools, South Australia

	Number of Schools			Secondary Studen			Secondary Students Enrolled			
At or about 1 August	High	Area (a)	High Schools	Area Schools (a)	Corres- pondence School (b)	Other (c)	Total			
1971 1972 1973 1974	97 98 102 103 104	51 50 50 49 49	69 837 72 519 73 619 74 291 77 310	4 904 5 139 5 116 5 013 5 085	141 168 224 157 203	100 100 129 117 139	74 982 77 926 79 088 79 578 82 737			

<sup>(</sup>a) Includes also special rural schools.

## Changes and Developments

Secondary schools have common aims and a large area of common studies. At the same time schools have become more flexible offering a variety of syllabuses that allow for differences in the aspirations and abilities of individual students.

A system of tracks from 0 to 4, employed previously by many schools to indicate the purpose of the various syllabuses, is gradually being displaced. In most subjects, attempts have been made to formulate courses of study which have a core for all students and various extension or enrichment courses to suit the students' varying needs and abilities. Integrated courses of studies are now being developed in some schools. In the humanities, for example, the branches of history, geography and social studies have been combined. These courses are integrated in a meaningful manner to cater for the needs of

<sup>(</sup>b) Fuil correspondence students only. Excludes Northern Territory students from 1974 (forty-five at 1 August 1975).

<sup>(</sup>c) Students receiving secondary education at primary schools, Aboriginal schools, institutions senior special schools and speech and hearing centres.

individual schools. Girls and boys have equal access to all courses of study offered in high schools. Health education and religious education courses have been devised and are being tested in a number of schools. In 1974 a co-ordinating curriculum committee was set up to co-ordinate the primary and secondary curriculum development.

Flexible and varying methods of teaching and learning are freely employed. Student representative councils are to be found in many schools and all have school councils which assist in their administration.

# Secondary Schools

The breadth of courses sought during the first three years of secondary schooling (the Junior Secondary Curriculum) is believed to be best achieved by offering students as wide a selection of subjects as is compatible with their abilities and interests. For convenience and guidance the subjects are divided into two basic groups. The first, a core group of subjects, consists of English, social studies, mathematics, science, art or craft, and physical education, to which is added a selection of two, three or four subjects from a second group called electives. Subjects in this group include such disciplines as foreign languages, further mathematics, science and craft, art, agriculture (in country area schools and high schools), history and/or grography, and music. The number of electives taken will depend upon the facilities available, the ability of the student and his vocational interests.

Opportunities are also given for general experience in some of the elective group of subjects. Instruction referred to as general experience is below the norm in time for that regarded as a full subject, but is sufficient to stimulate and awaken latent interest. General experience subjects may include foreign languages at a conversational level, art, further craft, physical education, music, agriculture, consumer education, shorthand, typewriting, road safety and drama.

The junior secondary levels are regarded as exploratory and aim to provide the student with as wide a range of interests and educational experience as possible before he commits himself to a particular course of study at the senior level.

#### Area Schools

Area schools are provided in certain country districts not served by high schools; they cater for both primary and secondary students and are co-educational. The range of subjects offered is more restricted than that available to larger secondary schools but all students have the opportunity to study core secondary syllabuses to Year 11 in their own district. Year 12 classes have been established in nine schools. English, social studies, mathematics, science, art or craft, and physical education, form a core to which may be added further mathematics, science or craft, history and/or geography. A foreign language is available in a few schools. The curriculum in many area schools is further broadened by general experience subjects.

# Special Rural Schools

These schools were first established in remote country areas in 1966 with the intention of supplying a limited secondary education in areas where it had been shown that there was an obvious need for secondary education but where the establishment of an area school was not warranted. Courses in these schools are restricted to the core subjects, English, social studies, mathematics, science—sometimes craft where facilities are available, and geography and/or history. Instruction does not proceed beyond Year 10 level.

# Correspondence School

Children who are unable to attend a secondary school may receive secondary education through the Correspondence School. Lessons are forwarded to cover eighteen academic subjects (all to Year 11 standard), and also certain drawing subjects. Assistance may take the form of full correspondence or supplementary courses. Supplementary courses are conducted through a primary school head teacher who may, in the case of remoteness from secondary school facilities, conduct grades beyond Year 7. Courses are also supplied to students in smaller secondary schools who wish to do a specific subject which is not available because of staffing problems.

At 1 August 1975, 254 students were receiving secondary education through full correspondence courses; of these forty-five were living in the Northern Territory and six in New Guinea. Students who wish to do matriculation studies (Year 12) are enrolled through the South Australian College of External Studies.

## The Curriculum

The aim of all secondary schools is to provide courses of study that best suit the needs of individual students. An extension of individualised learning has resulted in schools offering as wide a range of subjects and syllabuses as possible.

Secondary school subject curriculum committees, which are comprised of representatives of a wide spectrum of interests associated with education, meet regularly to discuss courses of study and to establish new syllabuses for secondary students. Although syllabuses are distributed to all teachers, they are in no way prescriptive. They are adapted to cater for the needs and abilities of students.

# NON-GOVERNMENT SCHOOLS

Secondary education is also provided by non-government schools; these schools, for the most part, are identified with various religious denominations. Non-government secondary schools usually charge fees, however, a limited number of internal scholarships are available. In addition to normal day attendance many non-government schools offer boarding facilities for country students. Non-government schools provide academic courses preparing students for the Public Examinations Board examination at the Year 12 level. Church schools give religious as well as secular education.

# Catholic

The Catholic school system provides secondary education at boarding and day colleges in metropolitan and country areas. The schools seek to serve the needs of students by providing (where appropriate) courses in technical education, business and commercial education and general education together with academic courses for those seeking admission to tertiary education after matriculation (Year 12). The majority of Catholic secondary schools are the property of the religious communities who conduct them and are supported by fees charged and government grants.

## Other

The Lutheran Church and the Seventh Day Adventist Church conduct secondary schools. Secondary education is provided also at primary/secondary schools (see page 195).

Training in typing and shorthand is provided at privately owned business colleges which specialise in this field. A number of these colleges also prepare students in certain Public Examinations Board subjects.

## Summary

The following tables give details of all non-government schools and cover both primary and secondary education. Additional information is shown in the tables on pages 192-3.

Non-government	Schools,	South	Australia
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	Musha	Number	Students on Roll at or about 1 Augus					
Year	Number of Of Teachers Primary (b) Schools (a)		ary (b)	Seco	ndary	Total		
·	Schools	(a) -	Males	Females	Males	Females	I Otal	
1971 1972 1973 1974 1975	. 163 . 163 . 157	1 682 1 722 1 777 1 819 1 900	11 029 10 870 10 736 10 896 10 996	11 640 11 362 11 193 11 227 11 071	7 586 7 557 7 846 8 123 8 118	7 432 7 676 7 960 8 371 8 700	37 687 37 465 37 735 38 617 38 885	

<sup>(</sup>a) Full-time teachers plus the full-time equivalent of part-time teachers.

In the next table non-government school students are classified according to the denominational affiliation of the school they attended. The predominant contribution of Catholic schools is clearly evident from the table. In 1975 Catholic schools accounted for 80 per cent of primary students and 57 per cent of secondary students attending non-government schools.

Students at Non-government Schools, South Australia
At or about 1 August

Denomination of School	1971	1972	1973	1974	1975
Primary: Catholic (a)	1 517 1 078 1 174 137	17 815 1 438 1 117 1 133 141	17 571 1 360 1 209 1 134 146	17 686 1 367 1 299 1 027 172	17 662 1 347 1 359 987 183
Undenominational (a)	22 669	22 232	509 21 929	572 22 123	529 22 067

<sup>(</sup>b) Includes students at special schools.

# Students at Non-government Schools, South Australia At or about 1 August (continued)

Denomination of School	1971	1972	1973	1974	1975
Secondary:					<u>-</u>
Catholic	7 957	8 265	8 720	9 117	9 584
Church of England	2 435	2 306	2 281	2 271	2 216
Lutheran	778	808	880	971	980
Methodist and Presbyterian (b)	3 034	3 017	3 053	2 825	2 715
Seventh Day Adventist	30	51	79	116	138
Undenominational	784	786	793	1 194	1 185
Total secondary	15 018	15 233	15 806	16 494	16 818

- (a) Includes students at special schools.
- (b) Includes Baptist and Congregational to 1973.

## **EXAMINATIONS AND EDUCATION ASSISTANCE**

#### Examinations

In addition to internal examinations conducted by the schools the Public Examinations Board (PEB) conducts a further examination at the completion of the fifth year of secondary education. Before 1966 this examination had been known as the Leaving Honours examination and while considered a desirable fore-runner to university study had not been compulsory for entrance to the University of Adelaide (matriculation being based on the Leaving examination). Commencing with 1966 this examination became the Matriculation examination.

Before 1966 the PEB had given a certificate for a pass in the required number of subjects at either the Intermediate or Leaving examinations and for a pass in one or more subjects in the Leaving Honours examination. From 1966 the Board has issued to each Intermediate, Leaving and Matriculation examinee a certificate showing the grade achieved in each of the subjects in which examined. The last PEB Intermediate examination was held in 1968 and the last Leaving examination in 1974. The total number of candidates for examination by the Board in one or more subjects at the 1975 Matriculation Examination was 10 605.

## PRIMARY AND SECONDARY EDUCATION ASSISTANCE

The Australian Government, the State Government and various private benefactors provide assistance to various categories of primary and secondary students.

## South Australian Government

On the completion of primary schooling, secondary students, whether at government or non-government schools, are entitled to a book and materials allowance of \$35 a year. Students who have to travel considerable distances to the nearest school, or school bus, may also receive travelling expenses.

A Book Loan Scheme designed to reduce the financial burden on parents has now been established in all secondary schools. Under this scheme the Book and Material Allowance is retained by the school and in return students are supplied with textbooks and class sets on loan. The allowance also covers the cost of certain materials. Parents are still asked to pay something towards the cost of amenities and additional materials, and this is covered by a fee of not more than \$15.

If forced to live away from home, assistance under the Isolated Children's Scheme is provided by the Australian Government. This scheme has replaced the South Australian Government boarding allowances and rural scholarships except in a few special cases not covered by the Isolated Children's Allowance.

## Australian Government

The Scheme of Assistance for Isolated Children assists the parents of students who do not have reasonable daily access to an appropriate government school. The main aim of this scheme is to assist student children whose homes are geographically isolated. However, assistance is also available in certain circumstances to handicapped children who must attend special schools or study by correspondence and to students undertaking a special type of course or specialised remedial teaching. Students who must live away from home to undergo diagnostic testing of an educational nature may also be assisted, as may students from itinerant families.

Assistance under this scheme comprises a basic boarding allowance of \$350 a year free of means test, an additional allowance of up to \$350 a year, which is subject to a means test and to boarding costs actually incurred, and a special supplementary allowance of up to \$450 a year payable where there is particular financial hardship. Eligible students studying by correspondence receive a basic allowance of \$200 and may receive an additional payment of up to \$150 a year in respect of approved expenditure incurred.

The Secondary Allowances Scheme aims to provide assistance to families with a limited income so that they may maintain their children at school for the final two years of secondary education. Under this scheme an allowance of up to \$450 a year may be paid subject to a means test.

The Australian Government also provides financial assistance for the education of students of Aboriginal or Torres Strait Island descent who attend approved schools. This assistance is provided under the Aboriginal Secondary Grants Scheme. The grants are open to full-time students under the age of twenty-one who attend an approved secondary school. Grants also may be made available to full-time students who attend an approved primary school provided the student is fourteen years of age but under twenty-one years. Benefits under this scheme comprise textbook and uniform allowances, living allowance, personal allowance and fees. Students who must live away from their normal place of residence in order to attend school are eligible for a boarding allowance in lieu of living allowance, and for up to three return journeys to their home each year.

## TERTIARY EDUCATION ASSISTANCE

In 1974 the Australian Government abolished tuition fees at universities, colleges of advanced education, and technical colleges and introduced the Tertiary Education Assistance Scheme.

The Tertiary Education Assistance Scheme is intended to assist students in approved courses at universities, colleges of advanced education, technical colleges and certain other approved tertiary institutions in Australia. Assistance under the scheme may include payment of living allowance, incidentals allowance, allowance for a dependent spouse and/or child, and fares allowance. All benefits are subject to a means test and a student must be eligible for living allowance in order to receive any of the other benefits. The maximum amount of living allowance payable is \$1 600 a year for independent students and students eligible to receive living allowance at the away from home rate. Students living at home may receive up to \$1 000 a year.

Commonwealth Teaching Service Scholarships are available to students who are prepared to undertake full-time courses which provide professional teaching qualifications for pre-school, infant, primary, secondary school or college and specialised teaching. These scholarships are not covered by a bond but are intended for students who will, on completion of their training, become members of the Commonwealth Teaching Service. Commonwealth Teaching Service Scholarships entitle the holder to a living allowance free of a means test, to a book and equipment allowance of \$80 a year and to the payment of compulsory fees which may be levied by the training institution. Students living away from home will receive assistance with travel costs between their home and place of study up to three times per year. The living allowance payable is \$1 000 a year in the case of a student living at home with his parents and \$1 600 a year in the case of a student who is eligible to receive the allowance at living away from home rates.

Awards under the Pre-School Teacher Education Assistance Scheme are available to students in approved pre-school teacher education courses. The living allowance paid under this scheme is the maximum rate payable under the Tertiary Education Assistance Scheme but is not subject to a means test. Other benefits are similar to those available under the Tertiary Education Assistance Scheme.

Aboriginal Study Grants are available for students of Aboriginal and Torres Strait Island descent who wish to study further after leaving school. Benefits include a living allowance and a textbook and equipment allowance.

Awards are also available for postgraduate study either in research or in course work. Assistance is by means of tax free allowances paid to award holders. The allowances payable consist of a living allowance, an incidentals allowance and under certain circumstances special allowances in respect of dependants, cost of travel, cost in setting up residence, and a contribution to costs associated with the production of a thesis. The living allowance payable to an award holder with no dependents is \$3 250 a year.

## OTHER ASSISTANCE

Under the Adult Secondary Education Assistance Scheme the Australian Government provides assistance to adult students undertaking one year full-time matriculation level courses at technical colleges, secondary schools and other approved institutions. This assistance is available subject to a means test and certain conditions of eligibility. Assistance under the scheme may include living allowance, incidentals allowance, allowance for a dependent spouse and/or child, and fares allowance. An applicant must be eligible for living allowance in order

to receive any of the other benefits and the provision of living allowance is subject to a means test. The maximum rates of living allowance are the same as for the Tertiary Education Assistance Scheme.

# Students Receiving Australian Government Student Assistance South Australia, at 30 June 1975

Scheme		No. of Students
Assistance for Isolated Children		704
Tertiary Education Assistance Commonwealth Teaching Service Scholarships Pre-School Teacher Education Postgraduate Awards Aboriginal Study Grants Adult Secondary Education Assistance	• • • •	91 344 258 39

#### TERTIARY EDUCATION

## THE UNIVERSITY OF ADELAIDE

The University of Adelaide was established in 1874 by Act of Parliament passed by the South Australian Parliament. The academic work of the University began in March 1876, with four professors, three part-time lecturers, a registrar-librarian, and eight matriculated and fifty-two non-graduating students attending classes in arts and science subjects. Within a decade, law, music and medicine were added; in 1888 studies in engineering were instituted in collaboration with the South Australian School of Mines and Industries; and at the turn of the century the University broke new ground for Australian universities by founding a conservatorium of music and by instituting studies in commercial subjects. Between the two wars the Waite Agricultural Research Institute and faculties of dentistry and economics were established, studies in agricultural science and engineering greatly developed, and diploma courses in pharmacy, public administration and physical education instituted.

The original full-time academic staff of four in 1876 had grown by May 1975 to 70 professors, 86 readers, 230 senior lecturers, 154 lecturers, and 139 tutors and demonstrators. Teaching by part-time staff amounted in 1975 to 59 000 hours. Part-time staff were mainly engaged in large first-year science classes involving laboratory work and in the faculties of engineering, law, medicine and dentistry.

The governing body of the University of Adelaide is the Council, comprising the Chancellor and the Vice-Chancellor (ex officio), twenty-two members elected by a Convocation of Electors, four members elected by the undergraduates and five members appointed by Parliament. The principal advisory committees of the Council are the Education Committee and the Finance Committee each of

which is appointed by the Council. There is also the usual university structure of faculties, boards of studies and special committees to advise on particular aspects of the University's work.

In 1976 the University has 12 faculties: arts (13 departments); economics (2); science (11); agricultural science (6); engineering (4); medicine (8); law; mathematical sciences (5); music; dentistry (4); architecture and town planning; and technology and applied science. Higher degrees are provided in all faculties except technology and post-graduate diploma courses are provided in applied psychology, business management, computing science, clinical science, education and library studies.

Details of student enrolments are given in the next two tables.

The University of Adelaide, Enrolments (a)

Course	1971	1972	1973	1974	1975
ligher degree candidates (b)	966	996	997	1 101	1 170
Indergraduate, diploma, certificate and miscellaneous students:					
Agricultural science	202	194	196	212	217
Applied science	100	47	23	10	3
Architecture	180	166	165	172	179
Arts	2 672	2 787	2 678	2 816	2 904
Dentistry	206	235	281	301	292
Economics	545	544	630	655	709
Engineering	610	625	623	605	620
Law	450	477	558	566	610
Mathematical sciences		_	234	262	326
Medicine	593	617	725	723	745
Music	103	125	134	159	170
Pharmacy (degree)	47	17	5	2	_
Science	1 495	1 500	1 296	1 331	1 255
Technology	225	111	55	29	14
Physical education	23	6			
Physiotherapy	.32	11			
Social Studies		_		_	
Miscellaneous (SAIT) $(c)$	81	103	100	96	115
Elder Conservatorium (d)	207	210	205	210	224
Visiting students (e)	-	18	31	51	73
Total	8 737	8 789	8 936	9 301	9 626

<sup>(</sup>a) Each student is counted once only; in the category appropriate to his principal course.

<sup>(</sup>b) Includes Master's qualifying candidates.

<sup>(</sup>c) Students enrolled in subjects as part of a diploma course at the South Australian Institute of Technology.

<sup>(</sup>d) Students not also enrolled for degree or diploma subjects.

<sup>(</sup>e) Students enrolled at another university, who may subsequently qualify for a degree of that other university, but who are undertaking part of their degree work at the University of Adelaide.

## **EDUCATION**

# The University of Adelaide, Enrolments, 1975(a)

	New Students -		. A	All Student	s	
Course	(b)	Full- time	Part- time	External	Staff	Total
Higher degree candidates	340	628	328	87	111	1 154
Master's qualifying candidates	10	3	13			16
Undergraduate, diploma and miscellaneous students:						
Agricultural science	70	175	42			217
Applied science			3			3
Architecture	47	160	19			179
Arts	1 065	1 619	1 231	54	-	2 904
Dentistry	62	267	25	_		292
Economics	228	416	293			709
Engineering	196	564	56			620
Law	151	529	81			610
Mathematical sciences	103	234	92			326
Medicine	123 52	738	7 17	1	_	745 170
Pharmacy	32	152	1/	1		170
Science	428	1 044	208	3		1 255
Technology		1 0-14	13			14
Misc. (SAIT) (c)	70		115		_	115
Elder Conservatorium (d)	70		224			224
Visiting students (e)	63	3	70	_		73
Total	3 078	6 533	2 837	145	111	9 626

- (a) Each student is counted once only; in the category appropriate to his principal course.
- (b) Figures for undergraduate courses include students who have transferred from another undergraduate course either in this or another university, or who are commencing a second course.
- (c) Students enrolled in subjects as part of a diploma course at the South Australian Institute of Technology.
- (d) Students not also enrolled for degree or diploma subjects.
- (e) Students enrolled at another university, who may subsequently qualify for a degree of that other university, but who are undertaking part of their degree work at the University of Adelaide.

Intending students are normally required to have passed the Matriculation examination at a prescribed overall standard. Interstate and overseas students, however, may be accepted on alternative qualifications.

The period of study ranges from three years for certain degree and diploma courses to six years for medicine. As from 1974 all tuition fees and associated charges for degree and diploma courses were abolished. However, fees are still payable in respect of courses in the Adult Education Department and for studies in the Elder Conservatorium of Music which do not form part of a degree course. All students are still required to pay a Union Fee, *i.e.* an entrance fee of \$20 and an annual fee of \$93 for full-time students and \$46.50 for part-time

students undertaking more than twenty-five per cent of a full year's work and \$23.25 for part-time students undertaking up to and including twenty-five per cent of a full year's work.

During the last decade significant changes have occurred in the composition of the student body. The proportion of full-time students has steadily risen, and the proportion taking part-time studies has steadily declined. The most significant change, however, has been in the numbers of students proceeding to honours and higher degrees and post-graduate diplomas; here the rate of growth is considerably more than that of undergraduate enrolments.

From its inception until the end of 1975 the University had conferred 26 281 degrees and 8 020 diplomas by examination. The growth of the University in recent years is indicated by the number of degrees and diplomas awarded in 1975 which totalled 1 891, compared with 1 228 in 1965.

# Waite Agricultural Research Institute

The Waite Institute was established at Urrbrae in 1924, through the generous benefaction of Mr Peter Waite, and this was largely responsible for the strong development of Agricultural Science in the University. Upon his death in 1922, Peter Waite endowed the University with the properties of Urrbrae, Claremont, and Netherby (approximately 120 hectares) together with Urrbrae House and ancillary buildings together with a Trust Fund of \$120 000, and by 1924 the Waite Agricultural Research Institute was established.

Since its establishment, the Waite Institute has conducted research into a wide range of agricultural problems. The research program is organised into six departments: agricultural biochemistry and soil science; agronomy; animal physiology; entomology; plant pathology; and plant physiology. Over the years, research projects have been carried out on the chemistry of soils, plant viruses, pasture management, ecological studies of insects, and numerous other subjects vital to the agricultural progress of the State and the nation.

The Mortlock Experimental Station of 275 hectares near Mintaro, north of Adelaide, was established in 1965 by the generosity of Mrs J. J. Mortlock. It provides more area for field experiments.

## The Library

The central library of the University is named the Barr Smith Library in honour of its original benefactor, Robert Barr Smith, and his son, Tom Elder Barr Smith. During his life Robert Barr Smith provided funds for the purchase of books and members of his family gave the University a substantial donation in 1920 in his memory. Tom Elder Barr Smith provided the first part of the present building in 1930 at a cost of nearly \$70 000.

The central library includes the medical library. In addition there are branch libraries for law, music and the Waite Agricultural Research Institute. Borrowing facilities are available to staff, students and graduates.

Holdings at the end of 1975 were as follows: central library 688 000 volumes (including medical library 78 000); law library 46 500; music library 2 000 bound scores (and 13 125 pieces of music in sheets); and the Waite Agricultural Research Institute 31 000, making total holdings of 781 000 volumes. In addition, the Library held the equivalent of 58 000 volumes in microform.

During 1975 the Library made 268 000 loans to students, staff and graduates; 21 000 to other libraries in South Australia; and 6 000 to libraries in other States and countries. It received 4 000 loans from other libraries. Accessions totalled 45 000 volumes and the equivalent of 2 250 volumes in microform, while withdrawals numbered 2 400 volumes. Serials titles received exceeded 19 400. Expenditure on staff, books, serials and binding and for other library purposes amounted to \$1 838 000 or 6.2 per cent of total university revenue expenditure.

## Elder Conservatorium of Music

Adelaide was the first University in Australia to establish a Chair of Music (1884) and a Conservatorium of Music (1897). In addition to full degree courses in practical studies, musicology and composition, the University School of Music provides instruction in the various branches of musical performance for part-time students.

Concert experience for students is provided through regular informal concerts internal to the Conservatorium and by occasional public concerts. The University Music Society, each year, arranges a series of night concerts by members of the staff, who also provide a series of Sunday afternoon public concerts and recitals during the winter months.

In 1975 there were 170 students proceeding to the degree of Bachelor of Music and 224 students taking single subject practical studies.

## Finance

Details of income and expenditure for the period 1971 to 1974 are shown in the following table.

The University of Adelaide, Finance(a)

Particulars	1971	1972	1973	1974
		\$'0	00	
Income for capital purposes:  Australian Government State Government	1 305 1 305	481 481	898 898	4 726 —
Income for other purposes: Australian Government	5 676 6 612 1 837 1 944	6 208 7 020 2 226 1 138	6 842 9 661 2 376 1 138	23 783 88 175 1 356
Total income	18 679	17 554	21 813	30 128
Expenditure: Teaching and research Administration Libraries Buildings, premises, grounds Other	11 710 1 221 853 3 972 539	12 673 1 636 1 008 2 558 981	12 315 2 164 1 179 3 899 864	20 506 1 604 1 603 5 269 1 231
Total expenditure	18 296	18 856	20 421	30 213

<sup>(</sup>a) Includes Waite Agricultural Research Institute.

## Residential Colleges

The residential colleges are independent bodies affiliated with the University. Three of the four colleges for undergraduates were founded by churches, but impose no denominational restrictions on admission; the fourth undergraduate college and the college for postgraduate students have no denominational affiliation. All are situated in North Adelaide within easy walking distance of the University.

Their names, church affiliations, years of founding and residential capacities are:

St Mark's	Church of England	1925 130 students, 12 tutors;
St Ann's	Non-denominational	1947 121 students, 8 tutors;
Aquinas	Catholic	1948 102 students, 12 tutors;
Lincoln	Methodist	1952 176 students, 15 tutors;
Kathleen Lumley .	Non-denominational	
	(postgraduate)	1968 70 students.

St Mark's confines its membership to men; in 1973 St Ann's and Lincoln and in 1974 Aquinas made their facilities available to both men and women. Kathleen Lumley has been co-residential since its foundation.

## Department of Adult Education

This department offers a range of courses for members of the general public (see page 225).

# Other Special Features

Unusual features of the University's work include its extensive research into the linguistics, myths, legends and musicology of the Aborigines; teaching and research in Computing Science ranging from first year undergraduate level to the Doctorate of Philosophy; the Mawson Institute for Antarctic Research (which also takes postgraduate students); upper atmosphere research by balloon and rocket; mineral exploration; and arid zone studies.

## THE FLINDERS UNIVERSITY OF SOUTH AUSTRALIA

During 1958 when the University of Adelaide began to plan two major new buildings on its existing 13 hectare site it became apparent that further expansion would have to take place elsewhere.

Early in 1961 the South Australian Government indicated that it would make available to the University of Adelaide an area at Bedford Park, of some 150 hectares, situated about eleven kilometres from the centre of Adelaide in the foothills of the Mount Lofty Ranges. Consequently the University of Adelaide made a submission for financial support to the Australian Universities Commission in 1962, which gave approval for the planning of Bedford Park. The institution became known as 'The University of Adelaide at Bedford Park'. Towards the end of 1965 the South Australian Government decided to make the University

of Adelaide at Bedford Park a fully autonomous university under the name 'The Flinders University of South Australia', after the great explorer and hydrographer, Matthew Flinders. A more detailed history of the Flinders University was included on pages 163-8 of the South Australian Year Book 1967.

The Flinders University of South Australia Act came into force on 1 July 1966. The Act places the whole management of the University in the hands of a council with powers to make statutes and regulations subject to the approval of Convocation which comprises the graduates of the University, graduates of other universities who have been awarded a diploma of the University and full-time members of the staff.

The Council comprises thirty-one members: the Chancellor; the Vice-Chancellor; the President of the Students Association; five members of the Parliament of South Australia; three members appointed by the Governor; eight members of the academic staff elected by the academic staff; one member of the ancillary staff elected by the ancillary staff; four persons elected by Convocation; one postgraduate student elected by the postgraduate students; three undergraduate students elected by the undergraduate students; and not more than three other members co-opted by the Council.

The first academic year of the University began in 1966, with enrolments of 382 first-year undergraduates and thirty-five graduate students.

Details of enrolments for the years 1972 to 1975 are shown in the following table.

Course	1972	1973	1974	1975
Undergraduate bachelor degrees:			· · · · · · · · · · · · · · · · · · ·	
Arts	1 035	1 251	1 447	1 586
Science	(a) 679	548	508	498
Economics	220	233	273	254
Education	168	240	265	249
Medicine		·	64	129
Postgraduate bachelor and diploma:				
Diploma Social Administration	61	69	120	
Bachelor Social Administration (b)				116
Bachelor Special Education				26
Diploma in Education	90	120	141	216
Diploma in Social Sciences (c)				21
Higher degrees (including master qualifying)	227	256	287	322
Miscellaneous	30	49	68	57
Other	35			
Total	2 545	2 766	3 173	3 474

The Flinders University of South Australia, Enrolments

<sup>(</sup>a) Includes 135 medical students who intended to transfer to the University of Adelaide at the end of 1972.

<sup>(</sup>b) Replaces Diploma in Social Administration from 1975.

<sup>(</sup>c) Commenced in 1975.

The Flinders University of South Australia: Enrolments, 1975

Course	Cammanaina	All Students			
Course	Commencing - Students	Full-time	Part-time	Total	
Arts	654	1 177	409	1 586	
Science	191	455	43	498	
Economics	111	180	74	254	
Education	69	159	90	249	
Medicine	70	128	1	129	
Higher degrees	117	150	147	297	
Master qualifying	18	7	18	25	
Postgraduate diploma	222	191	46	237	
Postgraduate bachelor	142	129	13	142	
Miscellaneous	45	4	53	57	
Total	1 639	2 580	894	3 474	

## Academic Organisation

The academic organisation of the University is based on 'schools' instead of faculties or departments. The school is the basic academic and administrative unit and one of the professors of each school is appointed to act as the chairman of the school.

At present there are eight schools: the Schools of Humanities; Social Sciences; Mathematical Sciences; Physical Sciences; Biological Sciences; Medicine; Earth Sciences; and Education. The School of Biological Sciences is an integrated one; there are no divisions into the traditional disciplines of botany, zoology, microbiology, etc., the emphasis being on the manner in which the teaching and research are organised, e.g. cellular biology, molecular biology. The remaining schools have a total of twenty-six disciplines established within them.

# The Flinders University of South Australia Full-time Staff Establishment, 1 January 1976

Schools: Academic (teaching and research)	316 146 88
Library: Professional	24 43
Registry: Senior administrative Clerical Caretaking, grounds and maintenance	38 72 62
Student services: Professional	6.5
Total	800

# The Library

The acquisition of books for the library commenced in 1963 when the first library staff were appointed. By the time teaching began in 1966 a collection of some 60 000 volumes had been assembled. At the end of 1975 the collection totalled 320 000 volumes and approximately 30 000 volumes are being added each year; 7 300 periodicals are currently received. Emphasis is placed on the acquisition of material to support the current teaching and research programs of the University. Loans to staff and students during 1975 totalled more than 120 000.

# Admission to the University

Normally students must have qualified for matriculation by passing the Matriculation Examination of the Public Examinations Board in a prescribed manner, and must be selected by the University. Flinders University, the University of Adelaide and the South Australian Institute of Technology have established an Admissions Office for Higher Education to which all students wishing to enter any of these institutions must apply for admission. Selection for admission is based, as far as practicable, on academic merit.

# Degrees Offered

The University offers the following degrees; Bachelor of Arts, Bachelor of Economics, Bachelor of Education, Bachelor of Medicine and Bachelor of Surgery, Bachelor of Science, Bachelor of Social Administration, Bachelor of Special Education, Master of Arts, Master of Arts (Drama), Master of Economics, Master of Education, Master of Psychology, Master of Social Administration, Master of Science, Doctor of Philosophy, Doctor of Letters and Doctor of Science. In addition there are postgraduate diplomas in Social Sciences. Education and Dietetics.

# The Flinders Institute of Atmospheric and Marine Sciences

The Flinders Institute for Atmospheric and Marine Sciences was established by the Council to further the University's interest in physical and environmental aspects of the air and the sea.

Academic staff of the University who seek to conduct their research within the framework of the Institute's operations may be considered as members. Postgraduate students working on the Institute's projects are regarded as associate members. As an association of scientists with related research interests, the Institute is able to undertake a relatively wide range of investigations including a significant contribution to an international research program on the Ross Ice Shelf, Antarctica, as well as expeditions to Lake Eyre and New Caledonia.

The Institute ensures that the University's academic and technological capabilities in atmospheric and marine sciences are made known to such government instrumentalities and private sectors of industry as may make use of them to the mutual benefit of both the outside group and the University. As such the Institute is able to co-ordinate contract and consulting work in many areas of the environmental and earth sciences and play an active role in introducing senior

undergraduate students and postgraduate research scholars to some of the scientific needs of the community. Tidal and specialised meteorological data libraries, instrumental facilities and field stations on the Coorong and Cape du Couedic as well as a series of publications are maintained.

In recent years, the work of the Institute has been extensively supported by the Australian Research Grants Committee, Department of the Navy, the South Australian Housing Trust, the Engineering and Water Supply Department the US National Centre for Atmospheric Research (a subsidiary of the National Science Foundation), Environmental Resources of Australia, the Horace Lamb Institute of Oceanography and the University's own research budget.

# Flinders University Institute of Solar and Electrochemical Energy Conversion

An Institute of Solar and Electrochemical Energy Conversion has been formed at Flinders University with a membership extending through the disciplines of biology, chemistry, physics, geography and meterology. The aim of the Institute is to explore alternative methods of energy production which are non-polluting and economically viable. The projects under investigation are concerned with collection, storage and conversion of various forms of solar energy.

## Institute of Labour Studies

The Institute of Labour Studies in the School of Social Sciences encourages graduate study, research and publication in the areas of industrial relations, labour economics, industrial psychology and sociology, and labour history. It publishes a quarterly review of labour events, *The Australian Bulletin of Labour*, and a working paper series, current research projects include studies of worker participation in industry, interaction between work and social activity, unemployment and wage relativity problems.

The Institute is administered by a management committee comprising a director, research associates and persons outside the University. The research associates include members of staff of the School of Social Sciences who are active in labour studies and members of staff of some other tertiary institutions in Australia.

## University Hall

University Hall, the University's first hall of residence was completed early in 1971. During the academic year it provides accommodation for nearly 200 students, mostly in single furnished study bedrooms. In addition some double study bedrooms are provided together with flat accommodation. During University vacations the Hall is also available for accommodation and conferences organised by outside bodies.

## Finance

Details of income and expenditure for the period 1971 to 1974 are shown in the following table.

The Flinders University of South Australia, Finance

Particulars	1971	1972	1973	1974
Income for capital purposes:		\$*6	000	
Australian GovernmentState Government	884 884	501 501	1 416 1 416	4 482
Income for other purposes:				
Australian Government. State Government Student fees Other	1 886 2 654 379 218	2 271 3 033 508 182	3 027 3 925 548 111	10 209 53 — 309
Total income	6 904	6 996	10 443	15 053
Expenditure:				
Teaching and research Administration Libraries Buildings, premises, grounds Other	3 534 553 527 2 305 189	3 945 710 644 1 485 154	4 998 956 740 3 495 269	6 686 1 254 875 5 386 338
Total expenditure	7 109	6 938	10 458	14 539

## ADVANCED EDUCATION

The South Australian Board of Advanced Education was established under the South Australian Board of Advanced Education Act, 1972 to function as a co-ordinating body for colleges of advanced education in South Australia.

The Board is responsible for the development of a balanced system of tertiary education (outside the universities) to meet the needs of South Australia for persons qualified in a wide range of vocations. The Board is the State accrediting authority for awards in advanced education; it exercises financial supervision over the capital and recurrent budgets of the colleges; and it is responsible for forward planning in advanced education in South Australia.

The Board is empowered to negotiate and co-operate with the Commission on Advanced Education, the Australian Council On Awards In Advanced Education and other national bodies concerned with tertiary education.

The colleges are the Adelaide College of Advanced Education, Kingston College of Advanced Education, Murray Park College of Advanced Education, Roseworthy Agricultural College, Salisbury College of Advanced Education, South Australian Institute of Technology, Sturt College of Advanced Education, and Torrens College of Advanced Education.

It is State Government policy to develop the former teachers colleges as multipurpose institutions; for example, journalism has been introduced at Murray Park College of Advanced Education; Torrens College of Advanced Education (incorporating the South Australian School of Art) provides courses in art and design, nursing and speech pathology courses are being conducted at Sturt College of Advanced Education and recreation can be studied at Salisbury College of Advanced Education.

Further details of college activities are listed below.

## ADELAIDE COLLEGE OF ADVANCED EDUCATION

Adelaide Teachers College had its beginnings as a Training School, later called the Training College, which was established in 1876 with thirty students. It is the oldest teacher training institution in Australia with an unbroken history and celebrated its centenary in June 1976. The College first occupied its present site in Kintore Avenue, adjacent to the University of Adelaide, in 1927 and substantial development has taken place including construction of the multi-storey Schulz Building. The College gained autonomy and was renamed the Adelaide College of Advanced Education on 1 January 1973.

The College at present offers courses for pre-service training of secondary teachers in general, but also caters for drama, music, school librarianship, secretarial studies, commerce and physical education teachers. Postgraduate courses are offered in specialist areas for teachers holding a three-year diploma and in the professional area of teaching for university graduates. Postgraduate courses are also available in educational administration and nurse education.

## KINGSTON COLLEGE OF ADVANCED EDUCATION

The Kindergarten Training College was established in 1907 under the auspices of the Kindergarten Union of South Australia. In 1967 the College changed its title to the Adelaide Kindergarten Teachers College. The reconstitution of the College as an autonomous college of advanced education was finalised when the Kingston College of Advanced Education Act was proclaimed on 6 June 1974.

The buildings on the present site in Childers Street, North Adelaide, were completed in 1972. Because of the demand for trained pre-school teachers, Kingston College of Advanced Education continues to specialise in courses for teachers in early childhood education. In addition to a three-year diploma course for the training of kindergarten and junior primary teachers and conversion courses for experienced primary teachers holding a two-year diploma, graduates of Universities or other Colleges of Advanced Education are able to undertake a one-year professional course to qualify them for kindergarten and junior primary teaching.

## MURRAY PARK COLLEGE OF ADVANCED EDUCATION

Murray Park College of Advanced Education was formerly the Wattle Park Teachers College, established in 1957 as the second Teachers College in South Australia. The College was granted autonomy and renamed on 1 January 1973.

In 1968 the 13 hectare Murray Park property in Magill, about 8 kilometres east of the city, was purchased as a new site for the College. When the College was granted autonomy it took its name from this historic property.

In the field of teacher education Murray Park College of Advanced Education provides undergraduate and postgraduate courses for primary and early childhood teachers. A postgraduate course is also available for candidates holding an approved tertiary award who wish to qualify for primary teaching. In developing as a multi-discipline College, an undergraduate journalism course and a postgraduate music course are being conducted.

## ROSEWORTHY AGRICULTURAL COLLEGE

Roseworthy Agricultural College is a college of advanced education located 50 kilometres north of Adelaide. Established in 1883, it is the oldest of Australia's agricultural colleges.

The College provides advanced education and training and conducts research in the theory, management and practice of primary production, in methods of agricultural marketing and in the industrial processes involved in the agricultural processing industries. In addition to normal classroom facilities the 1 200 hectare campus includes a dairy, modern winery, vineyards and orchard. About 500 hectares are cropped annually as part of the educational program for students. Residential accommodation is provided for students. A wide range of sporting facilities is available.

Studs are conducted for cattle (Jersey and Poll Shorthorn), sheep (Merino and Poll Dorset), and pigs (Berkshire and Large White). The College is involved in research and experimental work applicable to the area and in the production of pure seed of wheat and oat varieties suitable for South Australia. A major wheat and oat breeding program is also conducted.

The College currently offers four undergraduate and one postgraduate course: the Roseworthy Diploma in Agriculture (RDA), the Roseworthy Diploma in Oenology (RDO), the Roseworthy Associate Diploma in Wine Production and Marketing, the Roseworthy Associate Diploma in Farming and the Roseworthy Diploma of Agricultural Technology (RDAT).

To be eligible for admission to the undergraduate courses, applicants normally must have completed full secondary schooling. Selection is based on performance in examinations at fifth-year level of secondary education in South Australia, or equivalent, and on the assessed capacity of the applicant to complete the course. Provision is made for the admission of mature age students. RDAT applicants must have qualified for the RDA at an acceptable level.

At 30 April 1975 there were 242 students enrolled at the College.

## SALISBURY COLLEGE OF ADVANCED EDUCATION

The College, located on a 28 hectare site approximately 19 kilometres north of Adelaide, was established in 1968 as the Salisbury Teachers College. The College was granted autonomy and renamed Salisbury College of Advanced Education on 1 January 1973.

The College offers three-year teaching diplomas for junior primary, primary and secondary teachers and an associate diploma in recreation. Graduate diplomas in teaching are also available for those who have completed diplomas in teaching.

In 1977 the College will introduce a Bachelor of Education degree as a fourth year to the initial diploma in teaching qualification. Bridging studies for the Bachelor of Education degree are being offered in 1976 for those students who completed the previous diplomas in teaching. A graduate diploma in recreation may be introduced in June 1976.

## SOUTH AUSTRALIAN INSTITUTE OF TECHNOLOGY

The South Australian Institute of Technology, which adopted its present name in 1960, was established in 1889 as the South Australian School of Mines and Industries.

After its inception there was co-operation between the University of Adelaide and the School, and in 1903 joint engineering courses were established. An important development in the history of technical education came in 1957 with an agreement between these institutions whereby certain courses of study at the School would lead to the degree of Bachelor of Technology at the University. Other degree courses have subsequently been introduced.

Current government policy aims at the independent development of colleges of advanced education and the last degree students under the joint arrangement with the University of Adelaide were enrolled in 1969. The South Australian Institute of Technology Act was revised in 1972 and the Institute is now empowered to grant its own degrees. The first of these awards was made at the 1973 graduation ceremony.

The Institute maintains a close relationship with the Education Department and the Department of Further Education, and since 1959 there has been a progressive transfer of control of certain activities. Classes up to and including Matriculation level and all trade classes were transferred to the control of the Education Department, as was the Adelaide Technical High School in September 1963.

The Department of Further Education is progressively taking over technician courses from the Institute and this has enabled the Institute to expand its work in the professional and more advanced semi-professional fields. However, some courses, not approved for awards in advanced education by the Australian Commission on Advanced Education, will continue to be offered.

In addition to its campuses at North Terrace, City, and The Levels (approximately 13 kilometres north of the city), the Institute operates a centre at Whyalla teaching at both professional and semi-professional level.

The Institute is administered by a Council which has complete authority within the limits of the finance placed at its disposal and for which it is responsible annually to Parliament. The autonomy provided by this feature of control for many years made the Institute unique among Australian technical institutes, but in recent years, the interstate colleges have been granted autonomous government.

Details of income and expenditure for the period 1971 to 1974 are shown in the following table.

**EDUCATION** 

# South Australian Institute of Technology, Revenue and Expenditure

Particulars	1971	1972	1973	1974
Income for capital purposes:	\$,000			
• • •	0.101	0.6	1.400	4 513
Australian Government	2 131	865 1 101	1 469 1 206	} 4512
State Government	2 085 39	64	1 200	, –
Income for other purposes:				
Australian Government (a)	1 290	1 253	2 235	8 094
State Government (a)	2 404	2 843	3 434	<u>}</u>
Fees from students	812	948	922	<del></del> -
Other	63	54	65	126
Total income	8 824	7 128	9 331	12 732
Expenditure:			-,	
Capital (land, buildings, plant, furniture				
and equipment)	3 825	2 452	2 235	4 746
Revenue	4 574	5 315	6 509	8 225
Total expenditure	8 399	7 767	8 744	12 971

<sup>(</sup>a) Includes amounts transferred to Capital Account for equipment and furnishings purchased: 1971, (49); 1972, (42); 1973, (38); 1974, (34).

A wide range of courses and subjects to various levels is offered. Of the professional courses presented by the Institute, nineteen have been accredited by the Australian Council On Awards In Advanced Education, for the award of Institute degrees and six further courses which at present lead to Diploma in Technology awards, will progressively be submitted through the national accrediting machinery for acceptance as degree courses. The Institute presents one course which leads to a Master's award, and eight courses designed to provide graduate level training in a discipline for graduates of other disciplines which lead to the award of a Graduate Diploma.

For a number of years the Institute has offered courses entered after the eleventh year of schooling which lead by various periods of part-time study to a level of qualification below that of the full professional. These courses provide for those employed in the broad area between the tradesman and the professional and lead to the award of a certificate and in many diciplines, after further study, to an advanced certificate. The range of courses presented is being widened by the introduction of new associate diploma courses which may be entered after completion of twelve years of schooling. Degree, diploma and certificate courses applicable to local needs are conducted at the Institute's Whyalla campus.

In 1975, the Institute conducted over 630 classes. Of the 5 724 individuals enrolled in 1975, 4 415 were taking professional courses, and 1 309 certificate level courses. The majority of students attending the Institute do so on a part-time basis. There were 1 896 full-time students in 1975.

South A	Lustralian	Institute	of	Technology,	Students	and	Staff
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Particulars	1971	1972	1973	1974	1975
Students: Individual enrolments Subject enrolments Full-time teaching staff Part-time teaching staff	6 103	5 732	5 714	5 558	5 724
	17 215	16 631	17 084	18 262	20 175
	251	266	278	301	332
	600	643	608	693	625

The Library is situated at each of the three campuses of the Institute. The total holding at the end of 1975 was 101 000 volumes with some 2 000 periodical titles being received during the year. Loans to staff and students exceeded 93 000 in 1975.

Emphasis is placed on the acquisition of material in the applied sciences, technology and social sciences to support the Institute's teaching program. Collections of audio-visual materials including films, microforms, maps, prints, records and slides are being developed.

# STURT COLLEGE OF ADVANCED EDUCATION

Sturt College of Advanced Education was formerly Bedford Park Teachers College established in 1966 at the same time as The Flinders University of South Australia. The College was granted autonomy and renamed on 1 January 1973. The College occupied its present buildings in 1967. The site, of about 9 hectares, is located approximately 11 kilometres south of Adelaide and is adjacent to Flinders University.

The diploma of teaching is offered in the areas of junior primary, primary and secondary teaching. Junior primary and primary teachers may graduate as teachers after a three-year full-time program but it is common for prospective secondary school teachers to complete a fourth year of study at the College before commencing work as secondary teachers.

In 1975 Sturt College of Advanced Education began the first diploma in nursing (Diploma of Applied Science (Nursing)) to be conducted in South Australia at tertiary education level. The three-year program will be conducted jointly with the new Flinders Medical Centre which is situated a few hundred metres from Sturt College.

A course for the training of speech therapists also commenced in 1975.

## TORRENS COLLEGE OF ADVANCED EDUCATION

Torrens College of Advanced Education, established as an autonomous college of advanced education on 1 January 1973, incorporates the former Western Teachers College and the South Australian School of Art, both of which were responsible to the Education Department. The Western Teachers College, established in 1962, had developed from two annexes begun in 1959 to relieve pressure on the Adelaide Teachers College. The South Australian School of Art was established in 1861 under the title of the School of Design and first received

Australian Government finance under the States Grants (Advanced Education) legislation in the 1967-69 triennium.

The Torrens College of Advanced Education Act, 1972 provided for the retention of the name of the SA School of Art. There are four other schools, the School of Teacher Education, the School of Applied Science, the School of Community Studies and the School of Performing and Expressive Arts.

The College at present occupies six sites scattered over the metropolitan area. New buildings on a 27 hectare site at Underdale, which will eventually contain all schools of the College, were opened on 19 March 1976. The School of Teacher Education, the School of Applied Science and the School of Community Studies are at present housed in the new buildings.

In the field of education, three-year courses are offered for primary teachers, for secondary teachers in the specialist areas of art, craft, home economics and for technical teachers in colleges of further education. A fourth year of study is also available to graduates wishing to improve their qualifications, particularly in areas of special education.

Outside the field of education the College, through the School of Art, provides tertiary level training for those wishing to become practising artists, designers and craftsmen. Diploma courses are for four years on a full-time basis while associate dipomas are designed for part-time study also over four years.

Colleges of Advanced Education, Students by Course Level and Field of Study South Australia, 1975p

Course	Males	Females	Persons
Master degree:			
Para-medical	3	1	4
Graduate diploma:			
Agriculture	16		16
Applied sciences	39	2	41
Building, surveying and architecture	28	1	29
Commercial and business studies	178	24	202
Liberal studies	8	26	34
Music	1	<del></del>	1
Para-medical	200	5	7
Teacher education	399	341	740
Total,	671	399	1 070
Bachelor degree:		··	
Applied sciences	267	37	304
Building, surveying and architecture	322	16	338
Commercial and business studies	1 015	76	1 091
Engineering and technology	660	2	662
Liberal studies	118	230	348
Para-medical	121	270	391
Total	2 503	631	3 134

Colleges of Advanced Education, Students by Course Level and Field of Study South Australia, 1975p (continued)

Course	Males	Females	Persons
Diploma:			
Agriculture	121	8	129
Art and design	157	127	284
Liberal studies	28	21	49
Para-medical	8	99	107
Teacher education	2 776	4 956	7 732
Total	3 090	5 211	8 301
Associate diploma:			
Agriculture	18	2	20
Applied sciences	38	8	46
Art and design	58	48	106
Building, surveying and architecture	162	61	223
Commercial and business studies	224	15	239
Engineering and technology	280	3	283
Liberal studies	86	74	160
Para-medical	82	105	187
Total	948	316	1 264
Total:			
Agriculture	155	10	165
Applied sciences	344	47	391
Art and design	215	175	390
Building, surveying and architecture	512	78	590
Commercial and business studies	1 417	115	1 532
Engineering and technology	940	5	945
Liberal studies	240	351	591
Music	1		1
Para-medical	216	480	696
Teacher education	3 175	5 297	8 472
Total	7 215	6 558	13 773

## **FURTHER EDUCATION**

The Department of Further Education, established in 1972, is responsible for a wide range of post-secondary educational activities conducted by technical colleges and further education centres in all areas of the State. Adult education centres in the metropolitan area, which were administered from and located in secondary schools, are now administered from a technical college or further education centre.

Much of the educational development is directed towards an improvement in vocational education. This includes the provision of courses for the employment sectors of industry, commerce and government. These courses are provided at many levels from basic trade (apprentice) to post-trade, certificate and diploma level (see pages 227-8). Also associated with this vocational orientation are preparatory or general education courses.

Further Education also caters for continuing education for people of all ages by providing a wide variety of general, academic, craft, art, cultural and general interest courses. During 1975 there were more than 130 000 subject enrolments in over 1 000 courses.

The following table shows the range of educational activities conducted by the Department of Further Education during 1974 and 1975, and student hours involved.

Further Education: Distribution of Educational Activities, South Australia

	Student Hours					
Courses	19	74	1975			
- -	No.	Percentage of Total	No.	Percentage of Total		
Degree and diploma	39 837	0.4	141 569	1.4		
trade	2 267 885	22.1	2 727 268	25.8		
Basic trade or apprenticeship	2 437 740	23.7	2 384 895	22.5		
Other skilled trade and vocational	1 106 358	10.8	1 194 361	11.3		
Preparatory or general education General interest, enrichment and im-	1 945 445	18.9	1 748 448	16.5		
provement	2 476 333	24·1	2 381 788	22.5		
Total	10 273 598	100-0	10 578 329	100-0		

A more precise distribution of the Department's activities in 1975, in terms of fields of study, is shown in the following table.

Further Education: Student Hours by Courses and Fields of Study South Australia, September 1975

Field of Study	No. of Courses	Student/Hour Involvement Per Cent
Applied science	27	1.1
Art and design Building industry	145 78	11·4 11·8
Business studies	132	14.3
Engineering	178	25.4
Rural and horticultural	49	3.6
Music	65	1.1
Para-medical services	13	0.5
Service industries	160	12.3
General studies	171	18.5
Total	1 018	100-0

There is a continuing trend towards greater diversification in courses undertaken and also towards an increase in the certificate level of study.

The following table shows the number of subject and individual student enrolments in the years 1973, 1974 and 1975.

Further Education: Enrolments, South Australia

Course	1973	1974	1975
	SUBJ	ECT ENROLM	ENTS
Degree and diploma	243 21 580 24 363 9 848 11 136 41 215	428 28 442 26 337 14 928 19 819 34 734	585 36 085 24 372 17 408 14 811 36 728
Total	108 385	124 688	129 989
	INDIVIDUAL ENROLMENTS		LMENTS
Degree and diploma Technician, certificate and post-trade Basic trade or apprenticeship All other skilled trade and vocational Preparatory and general education General interest, enrichment and improvement	243 14 049 7 984 8 664 7 980 39 294	381 17 845 8 578 13 816 13 389 34 145	557 19 888 9 317 15 994 9 953 35 712
Total	78 214	88 154	91 421

The following table shows the numbers of staff employed in colleges and centres.

Further Education: Staffing, South Australia

Staff	1973	1974	1975
Full-time teaching	735 2 320	860 2 680	987 2 635
Total	3 055	3 540	3 622
Non-teaching (ancillary)	377	451	562
Total	3 432	3 991	4 184

<sup>(</sup>a) The large number of part-time teachers in each year reflects the Department's policy to have teaching staff who are currently involved in activities in commerce, industry and government, and to provide courses for groups, particularly in country centres, where full-time staff are not warranted.

## Curriculum

The establishment in the Department of a Curriculum Development Branch closely associated with industry and commerce has stimulated the development of new courses. This development has gone beyond the apprentice level and over a wider range of disciplines.

The number of courses offered by the Department in 1975 increased in all fields of study. The continual upgrading of vocational courses to certificate level and the introduction of many new courses has led to a significant rise in the number of certificate and vocational courses. The Department also expanded the range of studies offered in the degree and diploma areas. The large increase in the general interest and enrichment field occurred with the resumption of many of the courses which had been suspended in 1974 because of financial constraints and the introduction of a broad range of new courses.

Further Education: Courses, Sou	uth Australia
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Commo	Number of Courses				
Course -	1972	1973	1974	1975	
Degree and diploma Technician, certificate and post-trade Basic trade or apprenticeship All other skilled trade and vocational Preparatory and general education General interest, enrichment and improvement	3 54 45 144 62 205	3 72 45 152 62 217	3 77 44 161 46 153	10 115 52 332 106 403	
Total	513	551	484	1 018	

# **Teaching Methods**

The Department has continued in its efforts to improve public accessibility to courses by providing for the option of full-time, part-time or correspondence studies in a large number of courses. Special arrangements for country apprentices have continued to operate with success. Correspondence students have also been able to attend colleges and further education centres for supervised study.

The integrated training approach to vocational education continues to develop in many colleges. The more traditional divisions of technical courses into theory, drawing and practical plus on the job experience, have been broken down. Integration of course work on a project basis has resulted in a more meaningful learning experience for the students.

During 1975 there was a continuing involvement by teachers in the production and utilisation of different kinds of multi-media materials. Many colleges now produce and use a wide range of learning materials to meet this need. These materials which include slide and overhead transparencies, video tapes, and audio tapes as well as multi-media packages have become increasingly available for internal and external students.

The Multi-Media Centre located as a school of Kilkenny Technical College, provides a State-wide service in the production of learning materials and their usage. Part of this service has been to produce a number of video programs for general distribution and educational television service for a number of teachers.

During 1975 there has been a continuing expansion in the facilities of the library/resource centre. Book stocks, sound and video tapes, slides and transparencies have all been increased. A number of meetings and visits have been held to initiate and develop the concept of the resource centre as a central factor in the learning process.

## Administration

Colleges, further education centres and schools of the Adelaide Technical College function along autonomous lines. This autonomy encompasses enrolments, staffing at the lecturer and teacher levels and budgeting within the State allocations.

The Operations Division is responsible for translating established policies into operational programs particularly in the areas of curriculum, staff training and development. The Resources Division services all areas of the Department with emphasis upon research, building and equipment, administration, finance and clerical services.

# **Current and Future Developments**

The major areas of change and emphasis include the following inter-related developments:

the continuing development of the community college, both conceptually and physically;

the further development of general studies in colleges which were predominantly technical by tradition;

the adaptation of the 'open university' approach to education so as to reach a broader sample of the South Australian population at the post-secondary level;

the multi-media emphasis in the teaching-learning situation partly through the planned development of library/resource centres;

the further development of teaching staff with the appointment of staff-development officers;

extended provision for student welfare by the development of College Counselling Services and associated staffing.

## **Block Release Training**

A new form of technical education known as Block Release Training was introduced in 1973 for country apprentices in some trades in which apprentices previously were required to study by correspondence. It involves first and second year apprentices, who live outside a technical school district, attending a metropolitan technical college for a total period of eight weeks each year. In some cases it will be four blocks of two weeks and in other cases two blocks of four weeks. These apprentices will receive the same training as those employed in the metropolitan area and in country school districts and will not be required to undertake any correspondence course training. The Apprenticeship Commission arranges accommodation in the government hostel at Pennington, or private accommodation may be arranged, with a subsidy being payable in both cases.

## Workers Educational Association of South Australia

The Workers Educational Association of South Australia Incorporated (WEA) was established in 1914. Originally patterned on the English WEA, it is a voluntary adult education organisation which works in close co-operation with other adult education organisations, and the trade union movement.

Activities it organises include a comprehensive day and evening class program, postal courses for trade unionists, and support for an international adult and children's film festival. It possesses an adult education centre in the city. Courses are offered at the University of Adelaide, The Flinders University of South Australia, the Institute of Technology and the Murray Park and Salisbury Colleges of Advanced Education.

In 1975 there were 307 classes with a total enrolment of 10 150 students organised by the WEA, and a further twenty postal courses with an enrolment of 1 509. Since 1973 a program of trade union education has been developed with the aid of a State Government grant. More than 1 000 full-time and honorary officials, shop stewards and union members attended courses in 1975, studying industrial democracy, economics, workers compensation, communications, arbitration processes, grievance diagnosis, and other relevant subjects.

# University of Adelaide: Department of Adult Education

The University initiated adult education classes in 1917 under a Department of Tutorial Classes. A Department of Adult Education was established in 1957.

The Department provides lectures and discussion courses, short schools and seminars in a range of subjects for members of the general public. It publishes a quarterly journal *Issue* and also arranges special courses for professional people and former graduates.

In June 1972 the University opened an educational radio station under the call sign of 5UV. Established by a private donation of \$100 000, the station is administered by the Department of Adult Education and costs are met by the University and listeners' subscriptions. Since its opening the station has provided structured courses for professional people and the general public as well as providing educational and cultural programs.

In 1975, 5UV began operating under the conditions of a new experimental broadcast licence which has enabled an expansion of its education work. In addition, it now offers music for serious listening and community access programs.

Total enrolments for all departmental activities during 1975 were about 6 000.

## TRADE EDUCATION

Legislation governing apprenticeships in South Australia is contained in the Apprentices Act, 1950-1974 which is administered by an Apprenticeship Commission consisting of a full-time chairman and five part-time members representing employer organisations, trade unions and the Minister of Education.

An employer must receive the approval of the Commission before he can employ an apprentice. The Commission determines the term of indenture in any particular trade and no term can exceed four years. In the following table the number of new apprenticeships commenced for the period 1971 to 1975 are given for the major industry groups.

Number of New Apprenticeships Commenced: Trade Groups, South Australia

				<u> </u>	
Trade	1971	1972	1973	1974	1975
Metal	1 094	951	1 105	1 470	1 225
Electrical	375	330	381	392	386
Building	349	347	476	498	495
Furniture	122	128	189	226	194
Printing	70	60	69	108	54
Vehicle industry	128	112	129	172	155
Ship and boat-building	12	8	10	17	9
Bootmaking	21	14	18	7	16
Clothing	3	2			1
Coopering		1	2	6	2
Food	189	146	178	143	212
Hairdressing	267	295	389	342	279
Leather and canvas goods	3	_	4	3	1
Miscellaneous	9	15	18	20	13
Total all trades	2 642	2 409	2 968	3 404	3 042

The following table shows the number of new apprenticeships commenced, indentures completed, indentures cancelled, and apprentices employed at 31 December for the years 1971 to 1975.

Apprenticeships, South Australia

Particulars	1971	1972	1973	1974	1975
New apprenticeships commenced Number of indentures completed Number of indentures cancelled Number of apprentices employed	 2 175 288	2 409 2 089 298 10 682	2 968 2 229 386 11 186	3 404 2 477 439 11 948	3 042 3 463 484 11 184

The technical education of apprentices is the responsibility of the Minister of Education but the Commission has authority to make recommendations to the Minister on matters affecting their technical education.

Apprentices are required to attend technical colleges during working hours for eight hours a week or an eight week course in the first and second year. Exceptions occur for certain trades where the apprentice must attend, during working

hours, a technical college for twenty-four hours (three days) for every four weeks the college is open for instruction during the first, second and third years after commencement of his course.

Although apprentices are required to attend a technical college to complete basic training (normally three years), facilities are provided for those showing ability to attend voluntarily for a fourth year. During these years, apprentices normally commence studies of an advanced nature most of which are components of various Post-Trade Certificate courses which the apprentices are encouraged to complete as adults. These advanced subjects, and others designed to meet special demands for training in new processes and techniques, are also available to adult tradesmen and others employed in industry.

Effective Apprentice Enrolment in Technical Colleges, South Australia

Colleges	1971	1972	1973	1974	1975
Metropolitan technical colleges Country technical colleges South Australian College of External		6 250 992	7 903 1 280	7 385 1 156	7 594 1 102
Studies (a)	720	865	837	516	202
Total	8 392	8 107	10 020	9 057	8 898

<sup>(</sup>a) Includes Northern Territory apprentices.

Since 1960 the Commonwealth Development Bank has awarded Post-Apprenticeship Scholarships annually to financially assist young tradesmen and outstanding apprentices to further their education and technical qualifications. The scholarship scheme is administered on behalf of the Bank by the Australian Apprenticeship Advisory Committee. Ten scholarships were awarded to South Australians in 1975, compared with twelve in 1974.

## NATIONAL APPRENTICESHIP ASSISTANCE SCHEME

The Department of Employment and Industrial Relations administers the National Apprenticeship Assistance Scheme, which is designed to encourage employers to engage apprentices and to provide improved training in basic practical skills during the first three years of apprenticeship.

A subsidy is payable to all employers who employ one or more apprentices for every four tradesmen employed or who increase the level of apprentice employment compared with that for the preceding year. The subsidy is related to the age of the apprentice and is payable for the first year of the apprenticeship only. For each qualifying first year apprentice under the age of eighteen years the employer's subsidy is \$1 248. Increased amounts are paid for apprentices aged eighteen years and over.

In addition to these basic payments, subsidies are payable to employers to encourage them to allow their apprentices to engage in full-time off-the-job training in basic practical skills. Where an employer provides full-time training to approved standards, or releases apprentices for full-time training in appropriate courses at technical education institutions or in other approved training centres,

a subsidy of \$20 a week for each eligible apprentice is payable for the duration of the approved course. This subsidy is available for full-time off-the-job training during the first three years of the apprenticeship, subject to a maximum subsidised period of fifty-two weeks and provided that not more than twenty-six weeks are taken during the second and third years combined. Employers who make available their own training facilities for use by other employers are eligible for a further subsidy which is determined by the Department and related to the recurrent costs of training provided.

A living-away-from-home allowance is payable to both country and metropolitan apprentices required to live away from home to obtain or remain in an apprenticeship. This allowance, which offsets some of the additional costs associated with youths living away from home, is paid at the rate of  $12\cdot60$  a week to first year apprentices and 40 a week to those in their second year. If the employer is paying the apprentice a lodging allowance the amounts paid by the Department are reduced by the amount paid by the employer.

# Trainer Training

As part of its responsibility of implementing an effective national manpower policy the Department of Employment and Industrial Relations has established a trainer training service to improve the extent and quality of training practices throughout industry and commerce.

The general aims of the service are to promote training as a concept in industry and commerce; to improve training and to assist individuals who need training to adjust to the labour market. The service is directed at those with responsibilities for training others, including manpower training—instructional specialists and line personnel with duties for administering or implementing training. The service is divided into several trainer training areas: Training Officer Service, Instructor Service and a Supervisor Trainer Service.

The Instructor Service aims to provide basic instructional techniques for those who instruct groups of employees and those who provide individual instruction on the job. During 1975 Group Instructor, Operator-Instructor and Clerk-Instructor courses were given.

The Supervisor Training Service aims to provide resources to trainers to meet some basic needs of supervisors. Trainers in this service may be engaged in full-time or part-time training duties. The courses covered include Instruction-Communication, Inter-personal Relations, Accident Prevention and Method Improvement. These courses were provided in 1975.

The Training Officer Service is, at the moment, operating only in Melbourne and Sydney.

# National Employment and Training System

The National Employment and Training System (NEAT) provides a comprehensive system of labour training able to remedy labour imbalances in industrial sectors and geographical regions. NEAT forms a basis for the Australian Government's manpower policy, and is designed for operation by the Commonwealth Employment Service with the following broad objectives:

to alleviate unemployment wherever it may occur and to overcome shortages of skilled labour;

- to assist in the long term restructuring of the workforce, promote regional development, and improve the general level of available skills;
- to serve the social and economic needs of the community by means of special assistance, guidance, remedial training, and other measures designed to improve employment opportunities.

The NEAT System supersedes other employment training schemes such as those for women, widow pensioners, war widows, persons displaced by redundancy or technological change, Aborigines, general retraining for employment, rural reconstruction, permanent forces resettlement, disabled members of the forces, former regular servicemen, and national servicemen; these schemes were designed for specific categories of people. NEAT assistance is available to persons genuinely needing help to find suitable employment. Individuals assisted under NEAT must have specific employment objectives, which should be realistic for the individual and compatible with the requirements of the labour market.

Approved training can be undertaken full-time or part-time at training institutions, within industry or commerce, or by correspondence course. Persons undertaking full-time formal studies through NEAT are paid a weekly allowance. Companies providing on-the-job training for NEAT trainees receive a percentage of the average adult male award wage as a subsidy.

## STATE EXPENDITURE ON EDUCATION

The following tables show details of outlay and receipts by the South Australian Government on education for the year 1974-75.

# Consolidated Revenue Account: Receipts and Outlay on Education South Australia, 1974-75(a)

Particulars					
	Purchases of Goods and Services	Current Grants to Private Non-profit Organisa- tions	and	Total (Including Other)	Total Receipts (b)
			\$'000		
General administration, regulation and research Transportation of students Primary and secondary education Vocational training University education (c) (d) Other higher education (d) Other education programmes; Handicapped children Adult education Pre-school and childcare	163 319 12 214 150 4 302 2 151 3 566 981	211 3 260 2 -1 163 37 2 900	323 38 952 43 2 379	6 089 3 650 167 168 13 270 149 10 733 2 314 3 210 5 835	48 60 13 768 3 650 
Other	267	60	_	327	236
Total	196 107	6 634	2 130	212 745	22 281

<sup>(</sup>a) Charges for goods and services supplied have been excluded from receipts and deducted in calculating outlay.

<sup>(</sup>b) Mainly grants from Australian Government.

<sup>(</sup>c) Includes expenditure on general research.

<sup>(</sup>d) From 1 January 1974 the Australian Government assumed financial responsibility for tertiary education.

Loan Fund: Receipts and Outlay on Education, South Australia, 1974-75

Outlay				
New Fixed Assets	Existing Assets	Intra- Sector Grants	Total (Including Other)	Total Receipts (a)
		\$'000		· · · · ·
31	_		31	429
801	<del></del>			
37 717		_		17 450
5 986	394			1 455
63				20
1 819		437	2 256	122
810		_	810	745
47 227	2 263	437	49 927	20 221
	31 801 37 717 5 986 63 1 819 810	New Fixed Assets Existing Assets  31 — 801 — 37 717 1 869 5 986 394 63 — 1 819 — 810 —	New Fixed Assets Existing Sector Grants  31 — — — — — — — — — — — — — — — — — — —	New Fixed Assets

- (a) Mainly grants from Australian Government.
- (b) From 1 January 1974 the Australian Government assumed financial responsibility for tertiary education.

#### TRAVEL TO SCHOOL

A sample survey was conducted in August 1974 to obtain information about the principal means of transport by which full-time students of all ages travelled to school, university or other educational institution, the time at which they usually left home and the time usually spent on the journey. Details of the survey are available in the bulletin, Journey to Work and Journey to School, August 1974 (reference 17.5) published by the Australian Statistician.

# 6.3 SCIENTIFIC AND RESEARCH ORGANISATIONS

# AUSTRALIAN MINERAL DEVELOPMENT LABORATORIES

The Australian Mineral Development Laboratories (AMDEL) is a non-profit contract research and technical consulting organisation serving the mineral industry in Australia and overseas. A wide range of services are offered including chemical analysis, mineralogy, petrology, computer techniques, ore reserves calculations, mine planning, mineral engineering, chemical metallurgy, process control, materials science, plant evaluation, process design and commissioning and environmental studies.

AMDEL employs approximately 200 people, including about eighty with professional degrees. It maintains extensive laboratories and pilot plant equipment in Adelaide, and has an office in Sydney, a small laboratory in Perth, and a resident representative in Indonesia.

Contract research earnings currently are approximately \$2 million annually.

#### AUSTRALIAN MINERAL FOUNDATION

The Australian Mineral Foundation has been established by the industries, institutions and departments concerned with minerals and petroleum. It is administered by a council representative of these groups.

The mining and petroleum industries are confronted with a rapid development in technology and a continual requirement for transmitting new information both to operating staff and to postgraduate students. The Foundation fills this communication need in several ways:

by providing short-term concentrated training courses for professional and other specialised staff;

through the medium of symposia, conferences and distinguished lecturers;

through a specialised resource centre including a geoscience library and information service;

by selective film showings.

In addition, it makes available an auditorium, seminar rooms and offices.

## AUSTRALIAN WINE RESEARCH INSTITUTE

The Australian Wine Research Institute situated at Urrbrae promotes research and other scientific work for the Australian wine industry; it was established in 1955, having grown from a small research unit formed in 1934 within the University of Adelaide.

The Institute is administered by a nine-member council consisting of representatives from the Australian wine industry, the Australian Government, the Commonwealth Scientific and Industrial Research Organization, the University of Adelaide, and scientific advisers.

Comprising laboratories and an experimental winery, the Institute conducts research into wines, brandies, and winemaking, and specialises in the microbiology and chemistry of wines and brandies. A technical advisory section assists commercial winemakers with technical problems. Tested yeast cultures for wine fermentation are made available to the wine industry.

The John Fornachon Memorial Library maintained by the Institute is a specialised library of technical literature on wine.

# COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION

The Commonwealth Scientific and Industrial Research Organization (CSIRO) is Australia's largest research organisation. It is a statutory body created by the Australian Government in 1949 to replace the former Council for Scientific and Industrial Research (CSIR), which had been established in 1926. The powers and functions of CSIRO include scientific research in connection with Australian primary and secondary industries or any other matter referred to it by the Minister for Science, the training of scientific research workers and the awarding of studentships, the making of grants in aid of scientific research, the recognition and support of research associations, the maintenance of the national standards of measurement, the dissemination of scientific and technical information and the publication of scientific and technical reports.

CSIRO is governed by an Executive comprising a full-time Chairman, four other full-time members, and four part-time members. The Organization has thirty-five research Divisions, three of which have their headquarters in South Australia: these are the Divisions of Human Nutrition; Soils; and Horticultural Research.

## Division of Human Nutrition

The Division of Human Nutrition replaced the former Division of Nutritional Biochemistry on 1 January 1975. The staff are accommodated in laboratories in the grounds of the University of Adelaide and at the Glenthorne Field Station, O'Halloran Hill. The interests of the Division of Human Nutrition include: studies in epidemiology with reference to nutrition in adolescents and young adults and in aboriginal infants; biochemical and physiological studies involving the functions of minerals and trace elements in human nutrition and aspects of human metabolism and digestion.

## Division of Soils

The Division of Soils is one of three Divisions comprising the Land Resources Laboratories along with the Division of Land Use Research (centred in Canberra) and the Division of Land Resources Management (centred in Perth). The research program of this Division is concerned with the use of soils in agriculture and forestry, and the role of soils and soil materials in hydrology, plant growth and as habitats for flora and fauna. Increasing emphasis is placed on the importance of soil research in problems of the environment, although, from its inception the Division has necessarily been environmentally oriented. While early field programs in the Division involved survey and mapping, this aspect is now largely the responsibility of the various State Departments and pedologists are now engaged on more basic studies of the principles of soil occurrence, geomorphology, geochronology and sedimentology.

The work is organised into several programs, each of which comprises a number of projects. Because soil is a complex mixture of organic and inorganic materials, with a micro-flora and micro-fauna that vary with the material from which it was formed, the climate in which it occurs, and the plants and animals that occupy its surface, very few problems in soils are capable of a unidisciplinary solution. Consequently, although the Division operates through seven Sections, Chemistry, Microbiology, Micromorphology, Mineralogy, Pedology, Physics and Zoology, several of the programs involve work in more than one Section.

The headquarters laboratory is in Adelaide, with smaller groups in regional laboratories in Brisbane, Canberra, Hobart and Townsville. About half the staff are in the Adelaide laboratories, which hold the major groups for all sections except Micromorphology, which is at the Canberra laboratory. Not all the regional laboratories have each Section represented but scientists from Pedology and Chemistry Sections are located at all of them. Soil physicists and hydrologists are located at Brisbane and Canberra; the Mineralogy Section has a large group in Adelaide and a smaller unit in Brisbane.

## Division of Horticultural Research

This Division is concerned with research on perennial horticultural plants. It has its headquarters and a laboratory in Adelaide, a laboratory and field plantings at Merbein, Victoria, and a laboratory at Hobart, Tasmania.

At the Adelaide laboratory, research in plant physiology and plant biochemistry provides information about the mechanisms which control growth, flowering and fruiting of horticultural crops. This includes studies on the effects of water stress, temperature and salinity on plant metabolism. Other work deals with research on plant parasitic nematodes and on the domestication of Australian native plants.

At Merbein the Division is concerned with research on grape vines and a wide range of tree crops. For both drying and wine grapes it aims to provide better planting material through breeding new varieties, producing virus-free clones of established varieties, and through testing newly imported varieties and clones. Vine rootstock varieties are assessed for nematode resistance and salt tolerance. Research on spacing, trellising, pruning and mechanical harvesting of grapevines looks for better returns from vineyard operation and the investigation of the processing of dried vine fruit is aimed at improving its market acceptability. The quality of wine grapes from the vine breeding program and viticultural experiments is assessed in a laboratory equipped for small-scale wine making. A small-scale processing plant is used to examine problems of processing dried grapes.

Tree research involves the introduction and acclimatisation of new crops, the development of horticultural techniques for their production, the selection of scion varieties and the selection of salt tolerant and nematode resistant rootstocks for both new and existing crops. The Division is seeking varieties of subtropical fruits like avocados, guavas and macadamias suitable for diversifying fruit production along the Murray Valley and, together with tropical species, for growing in the tropical north of Australia. The suitability of pistachio, a valuable nut crop, for drier parts of Southern Australia is also under investigation. Trial plantings of these crops have been established at a number of representative localities as well as at Merbein.

A small group at Hobart, Tasmania, studies nutritional problems of apples related to storage disorders.

## MATERIALS RESEARCH LABORATORIES

A South Australian Branch of the Materials Research Laboratories (MRL) of the Department of Defence is located at Woodville North. The laboratory which was established in 1947 provides a scientific service to all branches of the Defence Services. After meeting defence requirements the facilities may also be made available on a commercial basis to non-defence government departments and to private industry provided such facilities are not available elsewhere in the State.

The laboratory works principally in the fields of chemistry, physics and metallurgy, and has a program of long term research projects which are related to these disciplines. In addition it has excellent facilities for standards and calibration work and for providing a consulting and testing service in the disciplines mentioned.

The laboratory has been formally appointed a Verifying Authority under the Weights and Measures (National Standards) Act 1960-1973 in ten fields of precision measurement. In these particular fields, the laboratory can verify and re-verify subsidiary standards for use by other laboratories in the State in accordance with the requirements of the Weights and Measures Act.

The major research projects of the establishment are concerned with the development of defence and commercial applications for electrophotography and electroradiography and with fundamental aspects of photoconductivity in order to provide basic information for use in establishing and improving electrophotographic processes.

A new process for the liquid development of electrophotographic images was invented at the laboratory in 1953 and world-wide patents have been taken out to cover this and many other related processes which have been established since that time. These new processes have found numerous defence applications including medical and industrial radiography, cartography, the printing of aerial photographs, the high density recording of electrical signals and facsimile transmission. In addition the MRL liquid development process has had wide commercial application in office copying equipment and in colour printing and proofing. The royalties paid to the Australian Government by overseas licensees of the electrophotography patents have amounted to approximately \$10 million.

At the end of 1975 the total staff of the laboratory was sixty-one including eighteen research scientists and experimental officers.

## INSTITUTE OF MEDICAL AND VETERINARY SCIENCE

The Institute of Medical and Veterinary Science was established in 1937, under the Institute of Medical and Veterinary Science Act, 1937, to incorporate the functions of the former Adelaide Hospital Laboratory. The Director of the Institute is the chief executive officer of the council which is responsible to the Minister of Health.

The Institute provides diagnostic facilities in all branches of clinical pathology for the Royal Adelaide Hospital and other metropolitan and country hospitals, for public health authorities, for industry, and for private practitioners. It also undertakes work in all branches of veterinary pathology for the Department of Agriculture and Fisheries and for veterinary practitioners and stockowners. Research is conducted into selected problems connected with disease in man, and in animals of economic importance. The staff of the Institute takes part in the teaching of the medical sciences to graduates, students and technicians.

At the Royal Adelaide Hospital the Institute operates a Blood Transfusion laboratory, a Division of Nuclear Medicine and undertakes all required autopsies. To meet the growing need for blood transfusion and laboratory services in rural areas, regional laboratories, staffed and administered by the Institute, have been established in nine towns.

The increase in volume of work is reflected in the increased number of tests performed: 27 000 in 1938-39; 175 528 in 1952-53; and 2 878 886 in 1974-75. Sections of the Institute that have recently grown in size and importance are the Renal Pathology Unit, the Gastro-intestinal Pathology Unit and the Electron Microscopy Unit.

The	Institute	ωf	Medical	and	Veterinary	Science

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
Staff at end of year:					
Graduate	91	99	111	164	176
Other	366	399	448	481	510
Tests performed	1 470 474	1 752 943	2 036 425	2 470 909	2 878 886
Revenue:			Dollars		
State Government grant	1 371 130	1 690 280	2 280 000	3 330 000	5 377 441
Fees for laboratory tests	1 120 341	1 207 494	1 145 815	1 292 342	1 508 577
Other	153 894	126 315	184 054	309 097	292 088
Total	2 645 365	3 024 089	3 609 869	4 931 439	7 178 106
Expenditure:					
Salaries and wages	1 764 556	2 201 285	2 691 840	3 725 993	5 474 257
Other	682 126	768 613	836 114	1 240 932	1 404 025
Total	2 446 682	2 969 898	3 527 954	4 966 925	6 878 282

A computerised system of laboratory reporting, accounting and data storage for rapid retrieval has been introduced and is progressively being developed. There are two remote terminals linked to the central computer, one at Modbury Hospital and one in the Casualty Section of the Royal Adelaide Hospital; further units will be provided in the intensive care wards. Telex links are operating to Port Lincoln, Port Augusta, Whyalla, Mount Gambier and Berri. Plans are developing for the Institute's computing service to be the base for an indepentent State laboratory computing organisation to cover the needs of several other large hospital laboratories in the metropolitan area.

## WAITE AGRICULTURAL RESEARCH INSTITUTE

The Waite Agricultural Research Institute was established, within the University of Adelaide, in 1924. The research projects conducted at the Institute cover a wide range of topics, of which the following are a few examples: relationship of stocking rates to pasture composition and fertiliser practices; the protein chemistry of the wheat grain; the genetics and breeding of cereals and pasture plants; flower and fruit development in horticultural plants; studies on soilborne and virus diseases of plants; nutrition of the honey bee; and the biochemistry of nitrogen fixation.

Further details relating to the Waite Institute may be found in Part 6.2 Education.

# WEAPONS RESEARCH ESTABLISHMENT

The Weapons Research Establishment, situated at Salisbury, is the largest of three research and development organisations within the Australian Department of Defence, and is responsible for research and scientific development in relation to

defence, including the operations of the Joint United Kingdom-Australia Weapons Research Project.

The Weapons Research Establishment is concerned with research, development and testing of guided missiles, experimental research in the upper atmosphere, and research and development in other defence areas including aerodynamics, propulsion, electronics, computing, systems analysis and operational research.

The headquarters of the Weapons Research Establishment occupies an area of 1170 hectares at Salisbury. Facilities within the area have been provided for branches of British firms which have contracted with the British Ministry of Defence to develop weapons systems or components.

The establishment comprises four main sections or wings, namely, Trials Wing, Applied Physics Wing, Weapons Research and Development Wing and Engineering Wing. Trials Wing is concerned with the operation, development, and instrumentation of the Woomera Range and the planning, execution and assessment of trials there. Applied Physics Wing is responsible for Australian defence research programs in the fields of electronics, optics, systems analysis, radio and optical propagation, radar, lasers, infra-red, visual surveillance and electronic warfare. Weapons Research and Development Wing supports Australian defence and development programs in the fields of aero-ballistics, rocket propulsion, weapon systems and marine physics. Engineering Wing provides engineering support including specification, manufacture, installation and maintenance of equipment; design and development in electronic, communications and mechanical engineering fields; and library services in technical publications and associated activities.

Testing ranges are situated at Woomera, which is approximately 500 kilometres north-west of Adelaide. A township, together with modern amenities including hospital, school, kindergarten, community store, swimming pool and all sporting facilities, were built at Woomera to accommodate the range and allied service personnel and their families. Woomera has a population of 3 750 including dependants and support personnel. The total strength of the Weapons Research Establishment including staff at Salisbury and Woomera was about 4 000 at November 1975.

Edinburgh Airfield which adjoins Weapons Research Establishment at Salisbury is the headquarters of the Royal Australian Air Force (RAAF) in South Australia and is a fully operational RAAF base. When necessary, aircraft associated with joint project or other trials are operated from this base.

A special article on the Weapons Research Establishment together with maps and diagrams was included on pages 184-92 of the South Australian Year Book 1969.

## United States Space Projects

As a result of an agreement between the Australian and United States Governments a Defence Space Communication facility has been constructed near Woomera.

# 6.4 CULTURE AND RECREATION

## LIBRARIES

# The State Library

The State Library of South Australia has its origin in a collection of books assembled in London in 1834, two years before the province of South Australia was founded. The modern character of the Library was established in 1940 when, after the Price Report of 1937, the Library was separated from the Museum and Art Gallery and became a State Government department administered by the Libraries Board of South Australia.

The oldest section of the Library is the Reference Library, which is the central basic collection. Since 1946, except for rare irreplaceable volumes and reference works, most of the books have been available for loan. Over 4 100 periodicals are received annually, and the Newspaper Reading Room files 333 overseas and Australian newspapers; in 1974-75, 49 500 periodicals were lent. In the same year the Map Collection answered a record number of over 11 100 inquiries for its 41 800 maps. Legislation since 1878 provides for the deposit in the Library of copies of all items published in South Australia.

The Reference Library has a representative basic collection of nineteenth and twentieth century material in all subjects except medicine and law. It has considerable strength in a number of subjects including librarianship, wine, jazz, Australian Aborigines, River Murray shipping, sailing ships, and nineteenth century illustrated works on natural history. In addition there is a collection of tape recordings of Australian authors, folksongs and Aboriginal music. The Library is an official depository for the publications of the Australian, British and Californian governments, and receives selected publications from the United States government and the United Nations.

In 1974-75 the Reference Services Branch answered 172 500 inquiries. This Branch supplies lists of references and arranges for the borrowing of books, periodicals and photocopies from libraries in other states and overseas. *Pinpointer*, a bi-monthly index to popular periodicals and the quarterly *Index to Australian Book Reviews*, are published.

In 1919 the Archives Branch was established for the collection of original South Australian historical material. In 1925 legislation was passed requiring reference to the Libraries Board before destroying or disposing of public documents. At the end of June 1975 there were 9 200 metres of occupied shelf space in the Archives. In 1974-75, 5 900 inquiries were dealt with involving 16 890 issues of documents, views, maps or printed sources. A journal, South Australiana is published twice a year.

The Juvenile Services Branch includes the Children's Services and the Youth Lending Service. The Children's Services, formerly the Children's Library, was established in 1915 and is believed to be the oldest in Australia. The carefully selected stock includes some 13 800 books in the Children's Literature Research Collection, a special collection assembled to assist in the study of children's books. School classes visit the Library, and talks and stories are addressed to groups of

children, both inside the Library and at outside venues, and to groups of parents and various societies. There are 23 000 registered borrowers in the metropolitan area and books are sent to 4 700 country children living in areas that do not have a public library.

To cater for the needs of young people between the ages of thirteen and eighteen the Youth Lending Service was established in 1957. Over 23 400 young people from the metropolitan area and country places are enrolled as members in the Service. The collection includes, besides general literature, publications of special interest to young people dealing with hobbies and careers. Posters and paperbacks are also available for loan.

In 1938 a Country Lending Service was established to provide books for residents in the country districts of the State, none of which had a free local public library at the time. The service continues today, but is restricted to residents of local government districts which have not been provided with their own public library service, and to people in the unincorporated districts of the State. In 1946 the Adelaide Lending Service was founded so that residents of the metropolitan area might enjoy direct borrowing privileges. In 1972 these two services were amalgamated to form the Adult Lending Services Branch, and at the same time the children's and young people's collections previously functioning as part of the Country Lending Service were taken over by the Children's Library and Youth Lending Service respectively.

## State Library of South Australia

Year	Reference Library	Children's Services	Adult Lending Services	Central Pool for Local Public Libraries	Youth Lending Service	Total
At 30 June:			Volumes	s Held		
1971	295 000 308 000 320 000	46 000 49 000 51 000 63 000 65 000	(a) 304 (a) 264 69 000 93 000 85 000		17 000 18 000 21 000 24 000 22 000	649 000 626 000 682 000 675 000 666 000
To 30 June:			Volumes	s Lent		
1971	101 000 105 000 108 000 109 000 113 000	188 000 194 000 246 000 247 000 263 000	486 000 533 000 466 000 521 000 609 000		89 000 98 000 122 000 111 000 118 000	864 000 930 000 942 000 988 000 1 103 000

<sup>(</sup>a) Separate details not available before 30 June 1973.

Since 1972, the Adult Lending Services Branch has enlarged its collection to include large print and foreign language books and periodicals, paperbacks, prints and posters. Car manuals, musical scores and drama sets are also available. The Branch supplies bulk loans to several hospitals and institutions, and to a number of prisons in South Australia. Extension services also cater for housebound residents and invalids. Non-technical inquiries and requests for information are dealt with at the Readers Adviser Desk. The total number of adult borrowers in the metropolitan area is in excess of 50 600, and there are more than 5 500 adults in the country registered as borrowers from the Adult Lending Services.

Photographic and electrostatic copying facilities are available to the public. In 1962 the Libraries Board began an extensive program of publishing facsimile editions and other works of Australian interest. Over 170 works have now been published, including the first edition ever of The Journal of Post Captain Nicolas Baudin. Other publications include several series of Occasional Papers in various subject fields, and an annual Miscellanea Musicologica, published in association with the University of Adelaide.

## Local Public Libraries

In June 1975, twenty-four local authorities, representing over half the State's population, were operating a total of thirty-five public libraries, under the provisions of the Libraries (Subsidies) Act, 1955-58. This Act, which gives the initiative for the establishment of free public libraries to local government, provides for the payment of subsidies (\$1 for \$1 based on all aspects of local government library expenditure except the cost of land) conditional upon a report on the matter by the Libraries Board to the State Treasurer. In 1974-75, subsidies amounted to \$530 000. The provision of bookstocks and other materials to public libraries operating under this Act is centred in the State Library, through its Public Libraries Branch, which also provides a Request and Reference Service to member libraries as a free service, as well as professional assistance to librarians and local authorities. This service includes advice on siting, and on internal planning of library buildings.

In the year ending 30 June 1975 the annual new book provision amounted to 101 500 volumes in addition to 25 000 paperbacks. About 10 000 volumes were sent to libraries in answer to requests, from a central pool of 155 000 volumes maintained in the Public Libraries Branch.

Local	Public	Libraries,	South	Austrana	

	Ye	ar			t Registered ar Readers	Books Lent	Stocks at End of Year
1970-7	ι		 	31	145 000	2 084 000	275 000
1971-72	2		 	31	127 000	2 366 000	303 000
1972-73	3.		 	32	150 000	2 621 000	330 000
1973-7	4		 	32	157 000	2 867 000	389 000
1974-7				35	162 000	3 228 000	442 000

#### Institute Libraries

Several country and suburban centres had formed institutes in the early 1850s. The first legislation on libraries was passed in the 1855-56 session of Parliament and resulted in the establishment of the South Australian Institute. In 1861, a new building was erected on the corner of North Terrace and Kintore Avenue for the Institute, which in 1884 was divided into two organisations, the Public Library and the Adelaide Circulating Library.

Institute libraries, which are situated in metropolitan and country areas throughout the State, are largely dependent on members subscriptions and in some cases on income from the Institute hall, but they also receive a government subsidy and about two-thirds of them receive support in varying degrees from local councils.

The Institutes Association of South Australia Inc. acts as a co-ordinating authority and as a purchasing agency for affiliated Institutes, these, however, retain complete autonomy, being governed by a committee elected by members. The conduct of Institutes is regulated by the Libraries and Institutes Act, 1939-1975.

The borrowing facilities of Institutes are available to subscribers and the general public has access to, and the use of, reading facilities in the library. Many Institute libraries allow children to borrow books from the library without charge.

Institute Libraries, South Australia
At 31 December

Particulars	1972	1973	1974	1975
Number of institutes Subscribers Number of volumes Volumes circulated during year	182	180	172	171
	46 349	48 063	47 202	46 330
	758 970	763 997	738 024	737 054
	1 684 113	1 773 869	1 654 259	1 654 818

## Other Libraries

Particulars relating to the Barr Smith Library at the University of Adelaide (780 625 volumes, including 58 000 microformes, at the end of 1975), the Flinders University Library (320 000 volumes at the end of 1975) and the South Australian Institute of Technology Library (101 000 volumes at the end of 1975) are given on pages 206-7, 211 and 218 respectively. Other libraries include those of the Royal Society of South Australia (approximately 29 000 volumes), the South Australian Branch of the Royal Geographical Society of Australasia (approximately 16 000 volumes) and the Parliamentary Library (about 60 000 volumes).

## MUSEUMS

## The South Australian Museum

Founded in 1856 as part of the South Australian Institute the South Australian Museum became a separate institution with its own board in 1940 under the provisions of the Museum Act, 1939, until 1972 when it became a Division of

the Department for the Environment. The Museum's first permanent building, the West Wing, was opened in 1884, the North Wing was completed in 1895 and the East Wing was added in 1915. Since then the Museum has expanded to occupy the historically and architecturally significant buildings of the Old Police Barracks. Similar to other major museums in Australia and overseas, it makes and preserves collections, carries out research and acts as an education and information centre for primary, secondary and tertiary students and for the public. Its main areas of interest are ethnology, natural history and geology.

The South Australian Museum has a staff of eighty-seven with twenty-seven professional research workers responsible for the care of the collections and for carrying out research. Several of the collections of specimens and data are outstanding. The collection of Australian ethnological material is of world renown while those of New Guinea ethnological objects, minerals, insects and southern Australian animals are excellent.

The research of the scientific staff is primarily taxonomic, involving the naming, identification and classification of animals, however, considerable stress is laid on their ecology, and inter-relationships with the environment. With the current interest in, and need for knowledge concerning conservation and environmental deterioration, this work is of increasing importance. Results of the research work of staff members are published in the Records of the South Australian Museum and in scientific journals throughout the world. The Museum's scientific Library houses more than 31 000 volumes.

Advice, based on their research results and on their specialised knowledge, is given by the scientific staff to many other research institutions and government departments. The anthropologists and archaeologists are, in addition to their research and other responsibilities, called upon to assist with the preservation of Aboriginal and historic relics (see page 243).

The Museum has a general Information Service dealing with about 10 000 inquiries annually and approximately 40 000 school children pass through the Education Centre each year.

Public entertainment and education involves the presentation of displays in galleries covering nearly 4 000 square metres of which about 1 000 square metres are being currently redesigned. Education booklets on a variety of subjects, mostly written by Museum staff and published by the Museum, are on sale at a nominal price. Cards are also published and are sold throughout Australia.

The scientific work of the Museum is supported by a number of distinguished scientists who are appointed as honorary associates, by the Cave Exploration Group of South Australia and by the general public. In particular the Friends of the South Australian Museum have given considerable support since their foundation in 1964.

## Other Museums

A number of historic residences serve as museums. In 1961 the 'Old Government House' at Belair was refurnished with relics of the colonial era and opened for public inspection. At 'Whalers Haven', Victor Harbor, a pioneer cottage has been restored and features many relics of early settlement with particular emphasis on the whaling industry. The home of the poet Adam Lindsay Gordon,

'Dingley Dell' at Port MacDonnell, is maintained as a historic house and Captain Charles Sturt's original home at Grange is open to the public. Items of historical interest are exhibited in old buildings in many of the early established country towns.

A railway museum has been established and maintained by a voluntary organisation, the Mile End Railway Museum. Locomotives and rollingstock are from the South Australian Railways, Australian National Railways, Silverton Tramway, BHP, BHAS and other private lines which have operated in South Australia. Included in the display are nineteen steam locomotives built between 1886 and 1954, two railcars, two diesels, one petrol locomotive and ten units of passenger and goods rollingstock dating from 1877, as well as a large selection of associated railway equipment. The museum, at Railway Terrace, Mile End, is open to the public on the first and third Sundays of each month.

Various items of maritime association including pictures, models and fittings from early ships are displayed at the Nautical Museum at Port Adelaide.

A number of special museums are maintained at the University of Adelaide for the use of the staff and students and a Museum of Economic Botany is associated with the Botanic Garden.

## The National Trust of South Australia

The National Trust of South Australia was established by Act of Parliament in 1955. It encourages the preservation and restoration of buildings of architectural, historic or scientific interest, the protection of scenic beauty and the conservation of land, flora and fauna.

The Trust, which is administered by a council, has forty-five branches spread throughout the State. Finance is provided by means of gifts, legacies, fund raising functions, subscriptions and a government grant.

Buildings of particular significance in South Australia are assessed on their architectural or historic merit and are categorised in accordance with the criterion adhered to by the Australian Council of National Trusts as either:

Classified, *i.e.* buildings having great historic significance or high architectural qualities, the preservation of which is essential to the heritage of the State; or

Recorded, i.e. buildings which contribute to the heritage of Australia and which should be recorded and their preservation encouraged.

Examples of the natural areas cared for are 'Willabalangaloo' at Berri, 'Waitiparinga' at Eden Hills, 'Roachdale' at Kersbrook and 'Engelbrook' at Bridgewater. The many beautiful or historic Trust properties include Beaumont House and the Marble Hill ruins and reserve. Marble Hill was officially opened on 15 February 1975 by His Excellency the Governor, Sir Mark Oliphant. Magnificent views of the Adelaide Hills and Plains can be obtained from the many vantage points in the thirty-one hectares of park-like setting in which the building stands. Original plans of the building are on view, together with photographs of both the exterior and interior before the building was destroyed by fire on 2 January of 1955. The original stables have been restored and converted for use as a kiosk.

The Trust also owns the G. S. Sandison Reserve at Hallett Cove, an area of international scientific interest because of its glacial pavements.

In 1963 the paddle steamer Marton, which now floats in the old graving dock at Mannum, was purchased and refitted; while the Willunga Court House and Police Station, both built in the mid-nineteenth century, were restored in 1969. In the following year the Trust fully restored the Customs House at Robe and in 1971 played a prominent part in persuading the State Government to save from demolition the architecturally classic and beautiful ANZ Bank Building in King William Street which had been classified by the Trust. This building has been renamed Edmund Wright House and is now occupied by the South Australian Registrar of Births, Deaths and Marriages, and many marriage ceremonies are held there.

At December 1975, the National Trust of South Australia controlled forty-nine reserves totalling 1 184 hectares and some forty-two restored buildings, many of which are used as folk museums in various country centres.

The headquarters of the National Trust in South Australia is in the historic and beautiful residence of Ayers House, once the home of the first and seven times Premier of South Australia, Sir Henry Ayers. It is situated at 288 North Terrace, and is being fully restored.

# Aboriginal and Historic Relics

The protection of Aboriginal relics and of traces of the early settlement of the State is governed by the Aboriginal and Historic Relics Preservation Act, 1965. The administration of this Act is the responsibility of the Minister for the Environment.

Remnants of Aboriginal culture such as prehistoric camp-sites, ceremonial grounds, cave paintings, rock engravings and canoe trees are to be found in various parts of the State. Although many such relics were destroyed following European settlement several remain which are of great scientific and tourist interest. Similarly there are many interesting examples of early European settlement, all of which are protected by the provisions of the Act.

A particular relic or series of relics may be protected by the Governor declaring the area in which it is found either a Prohibited Area or a Historic Reserve. Inspectors and Wardens are appointed to safeguard such areas and the Protector of Relics maintains a complete register of all prohibited areas and reserves, and also of unproclaimed known occurrences of relics.

A special article on Aboriginal relics together with a list of declared areas at 30 June 1969 was included on pages 201-8 of the South Australian Year Book 1969 and areas declared between 1 July 1969 and 31 October 1974 have been included in subsequent issues of the South Australian Year Book.

The areas declared between 1 November 1974 and 31 October 1975 were:

Innamincka Historic Reserve
Historic Reserve

Regazettal of amended boundaries of Innamincka Historic Reserve. Important Aboriginal cultural sites.

Kingscote Historic Reserve

First colonial settlement site.

## ART GALLERIES

## The Art Gallery of South Australia

The National Gallery of South Australia was founded in 1881 as a part of the South Australian Institute which in 1884 became the Public Library, Museum and Art Gallery of South Australia. This institution was dissolved by Act of Parliament in 1940, and the Gallery became a government department under the Art Gallery Board. The name was changed to the Art Gallery of South Australia in 1968. The first portion of the present building, the Elder Wing, was completed in 1900, the Melrose Wing on the western side and the facade were added in 1936, and in 1962 a three storey air-conditioned wing was built at the northern end.

The collections are broad in scope and include a representative selection of Australian and European paintings and sculpture. There are large collections of prints, drawings, silver, glass and ceramics (including an important section devoted to South-East Asia), as well as furniture, arms and armour, and coins and medals. In addition the South Australian Historical Museum incorporates early South Australian relics and paintings.

In addition to the permanent collections, the Gallery has a full program of visiting international and interstate exhibitions. With the establishment of the Adelaide Festival of Arts in 1960, the Gallery has participated as the organiser and venue of all the official art exhibitions brought to South Australia for this important cultural activity.

The Gallery has received many bequests, the Elder, Morgan Thomas, David Murray, Ragless, Boxall, Mortlock and Kolhagen bequests together totalling over \$252 000. In addition the State Government makes an annual grant for the purchase of works of art.

The staff of professional and technical officers undertake the research and development, care and conservation of the collections and the preparation of exhibits for public education and enjoyment. They also attend to public inquiries for authentication of works of art and guidance in conservation.

A regular program of film evenings, lectures and demonstrations is given and the Travelling Art Exhibition, a fully equipped van with illuminated portable screens, accompanied by a driver and a lecturer, tours country centres during school term. In 1975, sixty-nine centres were visited and the exhibition was viewed by 45 000 adults and children.

A society, The Friends of The Art Gallery of South Australia, was founded in 1969 for people interested in the fine arts and to create a body of people who would be informed about the activities of the Gallery. Membership stands at 1 050 and falls into four categories—Institutional, Family, Ordinary and Junior.

#### Other Galleries

South Australia's two leading art societies, the Royal SA Society of Arts (Australia's oldest art society which was founded in 1856) and the SA branch of the Contemporary Art Society of Australia Incorporated (founded in 1942) conduct exhibitions in their own galleries. An exhibition area, known as 'The Gallery', has been provided by the Adelaide Festival Centre Trust. Its inaugural exhibition was staged to coincide with the official opening of the Playhouse on

26 October 1974. A continuous, changing exhibition is mounted on its own premises by the Adelaide Potters' Club, South Australia's longest established craft society.

The SA Craft Authority was set up by the State Government in 1974 with administrative offices at St Peters in a large building known as the Jam Factory. Groups already operating there include the Crafts Association of SA and the Experimental Art Foundation Incorporated (SA).

The first permanent gallery to mount regular fortnightly shows opened at John Martin's emporium in the mid-1940s under the directorship of Stefan Heysen. The Bonython Art Gallery (now the Andris Lidums), which opened at North Adelaide in 1961, was the first establishment in Adelaide to be devoted solely to the business of fine art dealing. The Llewellyn Galleries at Dulwich, which opened in 1967 but has now ceased operations was the first building in Adelaide to be architecturally designed and erected to function as a commercial exhibition gallery. Since then, many commercial galleries have been established throughout the State. There are now over forty commercial galleries operating rotating exhibitions throughout the metropolitan area.

Outdoor exhibitions have been popular among amateur clubs, beginning with the Citizen's Art Group (now the Adelaide Art Society) in 1954. The Advertiser's annual open-air exhibition is supported by professionals and amateurs alike. The 1975 exhibition contained 1718 exhibits submitted by 995 entrants resulting in sales totalling \$29 556.

## MUSIC AND DRAMA

## MUSIC

Regular concerts are given by the Adelaide Symphony Orchestra, Adelaide String Quartet and University of Adelaide Wind Quintet, as well as by visiting artists and ensembles promoted by the Australian Broadcasting Commission and Musica Viva. Choral music is presented by three large choirs—Adelaide Choral Society, Adelaide Philharmonic and Harmony Choir, and by such chamber choruses as the Adelaide Singers and the Corinthians. The State Government's subsidised regional opera company, New Opera South Australia, stages regular production throughout the year in Adelaide and South Australian country centres. School performances aimed at promoting interest in opera are a regular feature of the Company's activities. Outside Adelaide, concerts are given in a number of country and outer-suburban areas, including an annual series of autumn concerts at Crafers in the Adelaide Hills.

During 1974 the final stages of the Adelaide Festival Complex were completed and officially opened. The Complex provides a centre for cultural activities of such diversity and quality that there have been many more people attending the theatre. Public response to the summer holiday performances was so great that extra performances had to be scheduled.

## **Australian Broadcasting Commission**

In the metropolitan area the Adelaide Symphony Orchestra each year gives twenty orchestral subscription concerts and six youth orchestral subscription concerts, usually featuring overseas conductors and/or soloists. The Australian Broadcasting Commission (ABC) also presents a recital series of six

performances by overseas artists. In addition there are at least six free orchestral concerts annually as well as a series of three Prom concerts.

During 1975 the Orchestra gave twenty-four free concerts for schoolchildren in the metropolitan area. Broken Hill had its own ABC subscription series of four concerts; one by the Adelaide Symphony Orchestra and three by international recital artists. In addition the Symphony Orchestra toured the country areas and during 1975 visited six other centres giving two free concerts for schoolchildren in each centre in addition to a public concert.

## Elder Conservatorium of Music

The Elder Conservatorium of Music at the University of Adelaide provides a comprehensive course of training for students in courses leading to the degree of Bachelor of Music, and also caters for part-time students by providing instruction in the various branches of music as single studies.

Particulars relating to the Elder Conservatorium at the University of Adelaide are given on page 207.

#### DRAMA

The South Australian Theatre Company (SATC), a fully professional company, presents a repertory of both classics and significant modern plays. In October 1974 the company moved into its permanent quarters, the Playhouse in the Adelaide Festival Centre, with the premiere of a new Australian play. This theatre is the drama theatre of the Adelaide Festival Theatre complex which, together with its experimental theatre space and outdoor amphitheatre, provides excellent facilities for the presentation of drama, orchestral concerts, opera, ballet, recitals and films. The company includes a youth activities team working full-time in the area of drama in education.

Touring productions of plays, ballet and opera from overseas and interstate are presented by commercial managements and by the Elizabethan Theatre Trust in Her Majesty's Theatre, which has a seating capacity of 1 150.

The Royalty Theatre stages musical plays and light comedies; the tiny Cottage Theatre presents both farces and musical comedies; while the Q Theatre is mainly concerned with modern Australian plays.

There are over twenty amateur theatrical groups operating in South Australia, the oldest of which is the Adelaide Repertory Theatre Inc. which has its permanent home in the Arts Theatre. The Adelaide University Theatre Guild which plays in the Union Theatre of Adelaide University has premiered many Australian plays. The new Little Theatre in the University Union, opened in 1974, provides another venue for intimate theatre presentations. Many actors in the professional theatre have graduated from such groups as the Adelaide Theatre Group and the Therry Society.

Numerous country centres support amateur theatre groups. The Department of Further Education provides some tuition in country towns while the Arts Council of Australia (SA Division) arranges country tours by theatre groups.

## The Adelaide Festival Centre

The Adelaide Festival Centre is a \$17 million performing arts complex at present nearing completion on a 2.5 hectare site near the centre of the city of Adelaide. The Centre comprises a multi-purpose concert hall and lyric theatre, two drama theatres, an open air amphitheatre and surrounding plaza areas.

## The Festival Theatre

The \$7 million Adelaide Festival Theatre was the first completed auditorium of the Centre and was officially opened on 2 June 1973. Seating nearly 2 000 people on three levels and in a series of tiered boxes, the Theatre has been designed for a kaleidoscopic range of theatre activities, including orchestral concerts and recitals, large-scale opera, ballet and drama, films, musical comedy, variety and jazz concerts, conventions and conferences. The seats extend across the Theatre in continental style with access from large foyers along the sides of the auditorium.

Catering facilities in the Theatre include a restaurant seating 120 diners, a licensed bar-lounge and an outdoor cafe on the northern terrace overlooking Elder Park. During interval, patrons can also enjoy a drink at the foyer bars. Box office facilities in the Theatre are unrivalled in Adelaide and have been designed to serve the Adelaide Festival of Arts every two years when some sixty different attractions are being booked concurrently. A music and book shop in the box office lobby provides an additional service to theatre-goers and to the general public.

The Festival Centre Trustees have a policy of commissioning and purchasing works of art for the Centre which now has a collection valued at more than \$250,000.

# The Drama Complex

In October 1974 work was completed on the \$6.5 million drama complex alongside the Festival Theatre. The largest auditorium in this complex is The Playhouse, a 600-seat, two-level theatre which is designed for both proscenium and thrust-stage productions.

The Playhouse is the home of the South Australian Theatre Company and is served by a production workshop consisting of design studio, carpentry and paint shops, assembly areas, wardrobe, millinery and wigmaking sections and a photographic dark room. The foyer areas of the Playhouse and the Bistro restaurant have panoramic views out over Elder Park and the Torrens River at the northern end of the Theatre.

Alongside the Playhouse and beneath plaza level is The Space, a 380-seat experimental theatre. A completely flexible auditorium, The Space can be arranged in almost any variation of seating and acting areas and incorporates electronic music facilities. It has been designed as an ideal venue for experimental performances and teaching workshops.

Where the Festival Theatre and Playhouse meet on the Elder Park side of the Festival Centre site, there is an open air Amphitheatre which is formed by the natural slope of the site where the plaza steps down to Elder Park.

## The Centre's Activities

Australian national touring companies, The Australian Opera and The Australian Ballet, give annual seasons in the Festival Theatre and the resident Adelaide Symphony Orchestra uses the Theatre for its annual orchestral and youth concert series as well as for special celebrity concerts by international artists and orchestras. The Adelaide Festival Centre Trust and principal Australian commercial entrepreneurs use the Theatre for a wide variety of other presentations. Since it opened, the Theatre has played host to many international groups including The Royal Shakespeare Company, The Leningrad Kirov Ballet, the Scottish Ballet (with Dame Margot Fonteyn), The Stuttgart Ballet, the Kwang Chow Acrobatic Troupe from the People's Republic of China, the Cleveland, Hungarian State Symphony, Shanghai and New York Philharmonic Orchestras, the Georgian State Dance Company and the Vienna Boys' Choir. Individual artists have included such diversely talented performers as Birgit Nilsson, Rod McKuen, Rudolf Nureyev, David Frost, Cleo Laine, Acker Bilk, The Supremes, Dave Brubeck, Ivan Rebroff and Yehudi Menuhin.

#### The Adelaide Festival of Arts

In 1958, a small group of Adelaide citizens developed plans for the first Adelaide Festival of Arts, which was held in 1960. Further festivals have been held in March in years of even number from 1962.

The Adelaide Festival has achieved many artistic triumphs in its sixteen year history and has been instrumental in bringing to Australia for the first time many notable overseas companies, performers and artists. It has seen the first performances of scores of major Australian productions and an increasing number of world premieres commissioned specially by or for the Festival. world premieres have included Peter Maxwell Davies' music theatre piece for The Fires of London, Miss Donnithorne's Maggot (1974), South Australian composer Richard Meale's oboe concerto Evocations performed by Heinz Holliger and Collegium Musicum of Zurich (1974), Sir Robert Helpman's ballets, The Display (1964) and Perisynthyon (1974), Alex Buzo's Coralie Landowne Says No performed by Sydney's Nimrod Street Theatre (1974), and the Patrick White play Night on Bald Mountain (1966). First Australian performances have included the Janacek opera The Excursions of Mr Broucek (1974). Sir William Walton's Troilus and Cressida (1964), Benjamin Britten's War Requiem (1964) and his church parable The Burning Fiery Furnace (1970),

Notable overseas companies, orchestras and performers taking part in the Festival program over the years have included The London Philharmonic, London Symphony, Hungarian State Symphony and Warsaw Philharmonic Orchestras, Collegium Musicum of Zurich, The Swiss Kammermusiker, The Black Theatre of Prague, The Salzburg Marionette Theatre, The Jacques Loussier Trio, The Royal Shakespeare Company, The Bunraku National Puppet Theatre of Japan, The Academy of St Martin-in-the-Fields, The Prospect Theatre Company, The Stratford National Theatre of Canada, The National Theatre of the Deaf from New York, Tito Gobbi, Rudolf Nureyev, Marlene Dietrich, Rita Streich, Yehudi Menuhin, Sir Malcolm Sargent, Siobhan McKenna, Carlos Montoya, Hans Hotter and Arthur Fiedler.

World famous writers who have been guests at Festival Writers Week include Yevgeny Yevtushenko, Edna O'Brien, Anthony Burgess, Allen Ginsberg, John Updike, Alan Moorhead, Angus Wilson and Nadine Gordimer.

The completion of the \$17 million Adelaide Festival Centre has caused a shift in the emphasis of the Festival of Arts. The regular appearances of leading overseas performers and companies at the Centre throughout the year has enabled the Festival to engage in activities considered more appropriate to arts festivals. These include the commissioning of new works, the encouragement of local companies and artists and the provision of a variety of programs to attract greater public interest and appreciation.

## The 1976 Festival

The latest Festival program, the most innovative and wide-ranging to date, provided ten world premiere performances. These premieres included two one-act operas, Fiery Tales and The Lamentable Reign of King Charles the Last, commissioned by New Opera-South Australia; a major piece of music commissioned from leading US composer, Charles Wuorinen; two smaller works for string quartet by Australia's Nigel Butterly and Colin Brumby; a ballet by American choreographer, Merce Cunningham; a new Australian play, A Toast to Melba; a one man show on the life of Lord Byron; and a youth participation play, Carlotta and Maximilian by Adelaide's Helmut Bakaitis.

Among the more important attractions at the Festival were the eighty-five members of the Siberian Cossacks from the USSR; the fifty members of the Radio Symphony Orchestra, Saarbrucken (West Germany); Lhamo, the National Folk Theatre of Tibet; and the Contemporary Ensemble and the Negro Ensemble Company from New York. Theatre offerings included Shakespeare's Coriolanus and Tennessee Williams' Kingdom of Earth; Miriam Karlin in her one woman's look at the court of Louis XIV Liselotte, the black South African plays, Sizwe Bansi is Dead, The Island and Boesman and Lena; and Australian puppeteer, Richard Bradshaw. The most important operatic event was the Australian premiere of Allan Berg's Wozzeck performed by The Australian Opera with the Adelaide Symphony Orchestra. There was also a strong program of popular music which included six low-priced family concerts in Rymill Park featuring a wide range of jazz, pop, rock and big band music.

Other features of the Festival were Writers Week, burlesque stage shows, street theatre and an exhibition of decorative jewellery. The next Festival will be held from 25 February to 18 March 1978.

#### 'Come Out'

In May 1975, the Festival administration with \$30 000 in special grants from the State and Australian Governments and a commercial sponsor, (the Savings Bank of South Australia) staged 'Come Out', the first in a series of planned festivals of performing, creative and visual arts for young people. These will be staged in years of odd numbers, between the main Festivals of Arts.

The first 'Come Out' festival, was held in the final week of the first school term and the first week of the May holidays (2 to 17 May 1975) and offered a total of fifty-one different arts performances, workshops, exhibitions and allied activities which were attended by a total of 56 000 children and students and 16 000 adults.

The second 'Come Out' festival is to be staged on 8-22 May 1977.

#### BROADCASTING

The supervision of radio and television broadcasting is an Australian Government responsibility and is carried out by the Australian Broadcasting Control Board under the *Broadcasting and Television Act* 1942-1975. An office of the Board is maintained in South Australia to administer the Act and in particular to supervise the program content and the technical quality of transmission.

Radio and television stations fall into two categories; national and commercial. National stations are operated by the Australian Broadcasting Commission. These stations do not broadcast advertising material, the Commission being supported by an annual grant from Australian Government revenue. Commercial stations operated by companies licensed by the Minister for Post and Telecommunication, derive their revenue from advertising.

## Radio

There are at present five metropolitan and thirteen country stations operating. The country or regional stations relay programs from metropolitan stations and in addition provide programs of local interest. The call signs and locations of stations are given in the following table; all call signs in South Australia are prefixed by the number '5'. Adelaide's three commercial stations broadcast continuously, while all other stations operated between 121 and 130 hours a week at June 1975.

Radio Stations, At 31 December 1975 South Australia

Natio	nal Stations	Commercial Stations		
Call Sign	Location	Call Sign	Location	
5AN	Adelaide	5AD	Adelaide	
5CL	Adelaide	5DN	Adelaide	
5CK	Port Pirie	5KA	Adelaide	
5LC	Leigh Creek	5AU	Port Augusta	
5LN	Port Lincoln	5MU	Murray Bridge	
5MG	Mount Gambier	5PI	Crystal Brook	
5MV	Renmark	5RM	Renmark	
5PA	Naracoorte	5SE	Mount Gambier	
5SY	Streaky Bay			
5WM	Woomera			

Since 1963, the Australian Broadcasting Control Board has made surveys of all metropolitan programs twice yearly to obtain information as to the general availability of programs in each city. The program analysis covers the period of transmission between 6.00 a.m. and 10.30 p.m. Results of the surveys indicate that commercial stations broadcast mainly light entertainment in contrast to the national stations which, being independent of advertising revenue, provide a much wider variety of programs. The distribution of types of program matter is set out in the following table. Details for South Australia are not available separately but closely approximate those of the Australian distribution.

# Broadcasting Programs by Categories, Australia, 1974-75 All Metropolitan Stations

Category	Commercial	National	All Stations
		Per cent	
Entertainment:			44.0
Light and popular music	. 55.4	21.7	44.8
Incidental matter		4.9	6.1
Variety	. 1.5	0.7	1.2
Drama	. 0.4	3.9	1.5
The arts	. 0.1	23.2	7.4
information and services:			
News	9.6	11.9	10.3
Sport	6.0	3.6	5.3
Information	1.0	6.9	2.8
Religious		1.8	ī·ĭ
Social and political	. 3·3́	17.9	<b>7</b> ∙9
Family	1.3	0.2	1.0
Children	. 45	ŏ.ã	0.3
Educational	·	2.5	ŏ.8
Advertisements	. 13·9	_	9.5
Total	. 100.0	100.0	100.0

## Television

Television stations have been established in South Australia in accordance with the Australian Broadcasting Control Board's planned development of television services in Australia. The following table shows the stations in service and the dates on which they commenced operations.

# Television Stations At 31 December 1975 South Australia

Call Sign and Channel	Location	Date Service Commenced
	NATIONAL STATION	is .
ABS—2 ABNS—1 ABGS—1 ABRS—3 ABCS—1 ABWS—1	Adelaide Port Pirie Mount Gambier Loxton Ceduna Woomera	March 1960 April 1965 December 1965 January 1971 July 1973 November 1973
	COMMERCIAL STATIC	ONS
NWS—9 ADS—7 SAS—10 SES—8 GTS—4	Adelaide Adelaide Adelaide Mount Gambier Port Pirie	September 1959 October 1959 July 1965 March 1966 March 1968

As the early stations became established their transmitting time was increased until in December 1963 the two commercial stations were transmitting in excess of seventy-seven hours a week and the national station sixty-seven hours. Since December 1974 the hours of service for the four Adelaide stations have varied between eighty-nine and 111 hours each week.

From 19 October 1974 to 28 February 1975 a restricted number of hours per week of colour television were transmitted for test purposes and on 1 March 1975 colour television was officially introduced in South Australia on a full-scale basis.

On commercial channels there is a considerable emphasis on drama and light entertainment, whereas the Australian Broadcasting Commission devotes more time to programs of an informative and educational nature. The Australian Broadcasting Control Board's analysis of television programs is derived from data obtained directly from commercial and national stations and is calculated on the actual duration of the programs and not, as formerly, on the scheduled duration as shown in program journals. The time occupied by advertising is not dissected in the analysis but a separate study of advertising time based on data supplied in audience measurement survey reports carried out in Melbourne provides some indication of the proportion of time occupied by advertisements; in 1974-75 this was estimated at 17.8 per cent of the total televising time of commercial stations.

Results of surveys conducted by the Broadcasting Control Board in 1974-75 indicating the proportions of total broadcasting time (other than advertising) for various types of programs are given in the following table. Details for South Australia are not available separately but closely approximate those for Australia.

Television Programs: Categories, Australia, 1974-75

Category	Metropolitan and Country Stations	Metropolitan Stations		Country Stations	
•	National	Commercial	All Stations	Commercial	All Stations
			Per cent		
Drama:					
Adventure	3-1	10.5	8-8	9∙4	6.2
Domestic and comedy	8-0	19.0	16.5	22.7	15∙0
Other	8.8	23.6	20.2	21.9	15-1
Light entertainment:		-			
Cartoons	2.7	6.4	5.6	3.9	3.3
Personality programs	0.7	7.2	5.7	7.7	4.0
Variety	2.9	4.2	3.9	4.7	3.7
Other	1.2	1.1	1.1	2.1	1.7
Sport	15.7	ŝ∙ŝ	7·8	5.5	10.9
News	6.4	4.4	4.8	7.3	6.8
Children	20·7	8.9	11-6	4.0	12.7
Family	1.2	3.4	^2·š	4.3	2.7
Information	5.4	1.4	2.3	2.0	3·7
Current affairs	6.9	2.7	3.7	2.7	4.8
Political matter	ŏ.4	ő·í	ŏ.2	Õ·í	0.3
Religious	1.8	ŏ. <u>\$</u>	1.0	1.4	1.6
The arts	1.2	0.1	0.4	1.4	0.7
Education	12.9	0.7	3.5	0:3	6.8
Total	100.0	100.0	100-0	100-0	100.0

## **FILMS**

## South Australian Film Corporation

The South Australian Film Corporation is constituted under the South Australian Film Corporation Act, 1972-1975. The Corporation has the sole right to produce, or arrange for the production of, films for or on behalf of the South Australian Government.

The Corporation also may undertake film productions on its own behalf, or for other organisations, and has enjoyed considerable success in several commercial ventures which include Sunday Too Far Away and Picnic at Hanging Rock.

Other functions of the Corporation include the distribution of films, the provision of library and other services relating to films, the arranging of courses of instruction for persons interested in film projection and research into the effectiveness of films generally.

## THE PRESS

The State's first newspaper, The South Australian Gazette & Colonial Register, was first printed in London in 1836, six months before colonisation. The second issue of this paper, which served both as the official government publication and as an unofficial reporter of the news, was produced in Adelaide twelve months later. The South Australian Gazette (renamed The South Australian Government Gazette in 1840) emerged as a separate organ in 1839 and the newspaper continued as The Register. In 1850 The Register became the first continous daily paper.

In the next twenty years several more daily newspapers were introduced, and for many years there were two morning and two evening papers daily. However, since the mid-1920s the present system of three major newspapers—one morning daily, one evening daily and one weekend publication—has emerged.

The Advertiser, published each morning except Sunday, was first issued in 1858 as The South Australian Advertiser and absorbed The Register in 1931. It is distributed throughout the State, with about 30 per cent of its circulation in country districts.

The News, published each evening except Sunday, was introduced in 1923 replacing two evening newspapers, The Express & Telegraph and The Journal, which traced back their origins to the 1860s. Almost 80 per cent of sales of The News are in Adelaide and suburbs.

The Sunday Mail, printed on Saturday evenings and distributed mainly on Sunday mornings, first appeared under this name in 1955 following a merger between The Mail, first printed in 1912 and the Sunday Advertiser, which was introduced in 1953. About 25 per cent of sales of the Sunday Mail are in country districts.

The Stock Journal, previously the Adelaide Stock and Station Journal, was established in 1904. It is published weekly and provides up-to-date information on stock and wool markets and the technical aspects of farming and property management.

To support these major State-wide newspapers, a strong provincial press has been built up. There are at present thirty country newspapers operating in the State with a combined circulation of over 106 000. Most of these are published weekly, although two appear bi-weekly and three tri-weekly. Of those still existing, The Border Watch (Mount Gambier) in 1861 and The Bunyip (Gawler) in 1863 were first to appear. Earlier publications are, however, recorded; The Port Lincoln Herald, for example, was printed in the early 1840s. There are also district papers containing items of local interest circulated in a number of suburbs of Adelaide.

## PARKS AND GARDENS

#### Adelaide Botanic Garden

The Adelaide Botanic Garden, occupying about 20 hectares east of the Royal Adelaide Hospital, was established in 1855 and was opened to the public in 1857. Botanic Park, an area of about 30 hectares north of the Garden was acquired in 1874 and has now been developed as an arboretum.

Since 1860 powers of management have been vested in a Board of Governors of eight members who serve for a period of four years but who may be re-elected for further terms.

The Garden contains an extensive collection of about 6 000 species of plants. Important features are the collections of native plants from dryland regions, cacti and succulents, the class ground, glass house displays and the Wisteria arbor. The Museum of Economic Botany, opened in 1879, houses a comprehensive carpological collection, displays of plant products and educational displays.

In 1954 the State Herbarium was re-established within the Botanic Garden Department and a new herbarium building was completed and occupied in 1965. At present it contains about 250 000 specimens.

State-wide advisory services are available on all matters relating to ornamental horticulture.

Experimental tree plantations have been established at Giles Corner, Kulpara, Lameroo, Stansbury and Meningie. Mount Lofty Botanic Garden of approximately 80 hectares was established in 1960 and is expected to be opened to the public in the next few years.

In the mid-1960s the Wittunga garden at Blackwood was donated by the Ashby Family to the Botanic Garden. This comprises approximately 15 hectares and has Australian and South African plants. This garden was opened to the public in mid-September 1975. Visiting days are Saturdays, Sundays, Public Holidays and Wednesdays from 10 a.m. to 4 p.m.

## Zoological Gardens

The Royal Zoological Society of South Australia was founded in 1878, and in 1883 approximately 8 hectares of Botanic Park were granted to the Society for the establishment of the Zoological Gardens. At the same time arrangements were made for the various exotic and Australian animals and birds previously housed in the Botanic Garden to be transferred to the Zoological Gardens.

The Zoological Gardens contains an excellent collection of mammals, birds and reptiles. Particular emphasis is given to Australian fauna and especially to native Australian birds. During 1974-75, 115 species and varieties of mammals, including a large collection of marsupials, and more than 250 different species of Australian and foreign birds were exhibited.

The many mammals, reptiles and birds are attractively displayed in cages and enclosures; the enclosures for some animals are moated yards freely open to public view. Two walk-through aviaries, a Children's Zoo, where the animals can be handled and fed, and a nocturnal house for the display of animals which are more active during the night than the day, are features of the Gardens.

The revenue necessary for maintaining and developing the Gardens is obtained through an annual State Government grant, from gate receipts and sundry sources.

During 1974-75 about 392 500 persons visited the Zoological Gardens.

## National Parks and Wildlife Service

The National Parks and Wildlife Act, 1972-1974 repealed several Acts and amalgamated the previous functions of and areas controlled by the National Parks Commission, National Pleasure Resorts, the Fauna and Fiora Board and the fauna section of the Fisheries and Fauna Conservation Department to form the National Parks and Wildlife Service. The Service is a division of the Department for the Environment and its purpose is to establish and manage reserves for public benefit and enjoyment, and to conserve wildlife.

The Act provides for the protection of all fauna, flora and natural features within reserves and all protected and rare species of fauna and flora outside reserves. The areas are classified into the following types of reserves:

- 1. National Parks (parks of national significance):
- 2. Conservation Parks (primarily for conservation);
- 3. Recreation Parks (to allow for recreation without undue danger to natural areas);
- 4. Game Reserves (to enable management of wildlife).

At 31 October 1975 the reserves comprised 173 areas throughout the State and consisted of eight National Parks, 142 Conservation Parks, sixteen Recreation Parks and seven Game Reserves. The total area was almost 3.6 million hectares, or 3.7 per cent of the State. Areas under Service control ranged from 0.4 hectares (Lipson Island Conservation Park) to 2 132 600 hectares (an unnamed conservation park in the north-west of the State).

A description of some of the parks, recreation reserves and places of historical or scenic interest was included on page 217 of the South Australian Year Book 1972. Flora and fauna are discussed in Part 1.4 Natural Environment.

## Municipal Parks and Gardens

The City of Adelaide is surrounded by 700 hectares of parklands, considerable areas of which are devoted to gardens (136 hectares), golf courses (100 hectares) and other recreational areas. The form of development and

flexibility of areas permits varied usage by the public including equestrian activities, swimming, boating, ball games, picnicking, fetes, Christmas parties, art displays and pop concerts. Plantings during the year 1974-75 included 1116 trees and 590 shrubs.

Most suburban and country local government authorities maintain parks and gardens within their areas.

## RECREATION AND SPORT

## Division of Recreation and Sport

The Division of Recreation and Sport was established by the South Australian Government in October 1973 as part of the new Department of Tourism, Recreation and Sport. The functions of this Division include:

the provision of opportunities for people to develop their recreation and sport skills to the fullest extent;

the encouragement of community involvement in both the administration and programming of recreation and sports organisations throughout the State;

the co-ordination of recreation and sport resources in co-operation with other Government departments, non-statutory organisations and local government authorities:

the provision of public information and data relating to recreation and sport:

the provision of facilities for recreation and sport which will meet the needs of the community;

the positive encouragement and support to those who wish to experiment with innovative projects in recreation and sport;

the sponsorship of a Recreation Advisory Council and a Sports Advisory Council, with representation from non-government sources, to provide advice to the Minkster and the Department on major policy matters;

the implementation of Government regulations related to totalisator operations and protection of interests of those concerned with the operation of on-course totalisators:

assistance to associations in interpreting the Government regulations related to small lotteries.

## SPORTING FACILITIES

In terms of attendance the most popular spectator sport is Australian Rules football; during the 1975 season the average attendance at the 90 minor round matches was 7 672 while the average at the six final matches was 31 765.

In addition, there were seven League Cup matches for the Datsun Trophy, with an average attendance of 11 161. The average attendance at two interstate matches was 18 742 while the two Champions of Australia matches had an average attendance of 14 921.

Adelaide Oval, occupying approximately 6 hectares of the north parklands, has been used for major cricket and Australian Rules football matches. The record attendances have been 62 543 on 2 October 1965 for Australian Rules football and 50 962 for Test cricket on 14 January 1933. In addition there are first class suburban ovals at which major sports are played.

From 1974 the South Australian National Football League Inc. has used its headquarters ground, Football Park at West Lakes, for major games with the Adelaide Oval as a support oval for matches when Football Park is unavailable or when other matches have been programmed there.

The Olympic Sports Field which features a new synthetic 'tartan' track is the Headquarters of the South Australian Amateur Athletic Association which is affiliated with the Amateur Athletic Union of Australia. Each Saturday from October to March inter-club contests are held at this arena with an approximate annual attendance of 100 000 competitors and spectators. The Olympic Sports Field is also used by the South Australian Women's Amateur Athletic Association which conducts competitions on Saturday afternoons.

The Apollo Stadium at Richmond is a multi-purpose air-conditioned building with seating for 4 390 spectators at which a weekly basketball competition is conducted. It is situated on a 2-hectare site and is the headquarters of the South Australian Amateur Basketball Association Inc. The stadium is also used by visiting entertainers. Other basketball stadiums are at Forestville, Bowden, Marion, Hillcrest, Colonel Light Gardens, Campbelltown, Woodville, Salisbury and several country centres. Many school gymnasiums have basketball facilities and this sport is played in the open at various centres.

The parklands of the City of Adelaide are used extensively for sporting purposes and during 1974-75, 383 sports permits were issued catering for eighteen different sports.

Sports grounds are distributed throughout suburban Adelaide, at approximately two to three kilometre intervals, and throughout country areas. In addition sports areas are available at most government and non-government schools.

## Race Courses

There are four registered metropolitan courses; Morphettville, Cheltenham, Victoria Park (occupying approximately 23 hectares of the east parklands) and Oakbank. In addition there were, at 30 June 1975, thirty-four registered racing clubs and twenty-eight registered country courses. Picnic race meetings are held at a number of outlying centres.

## **Trotting Tracks**

Metropolitan trotting in South Australia is conducted at Globe Derby Park, Bolivar, a modern and well-appointed track. There are twelve other courses in use in the State and six of these (Gawler, Kadina, Kapunda, Mount Gambier, Port Augusta and Port Pirie) have facilities for the conduct of night trotting. A new track at Murray Bridge was opened in March 1976.

## Dog Racing

Greyhound racing (with betting) was introduced into South Australia in May 1971 with meetings at Whyalla and Strathalbyn. Other tracks have been established at Angle Park, Gawler and Port Pirie since that date. Meetings are

held three times a week. Average attendance at Angle Park, the city track, is approximately 3 000. At present about 5 000 people own or train greyhounds in South Australia. The estimated greyhound population is 10 000 dogs.

#### Golf Courses

At 30 June 1975 there were eight suburban public courses, four 18-hole courses including one at National Park, Belair, and four par-3 links. There were also fourteen private courses operating within suburban Adelaide. The last course completed was an 18-hole par-3 course at Valley View in 1974. In addition there are courses at many country centres.

## **Motor Racing**

Adelaide International Raceway at Virginia was opened on 2 January 1972. It occupies an area of 65 hectares and contains two racing circuits of 2 and 3 kilometres respectively, and a drag racing strip. There is provision for 20 000 spectators and approximately fifty meetings are held each year.

## **Tennis Courts**

The South Australian Lawn Tennis Club's courts (thirty-four grass and eight hard) at Memorial Drive, North Adelaide occupy approximately 4 hectares of the north parklands. The centre court was the venue for Davis Cup matches in 1952, 1956, 1963, 1968 and 1975. At 31 December 1975 the parklands also contained approximately 220 other tennis courts. Courts associated with schools, churches and private clubs exist throughout the State.

## Lawn Bowling Clubs

At 30 June 1975 there were 241 bowling clubs registered with the Royal South Australian Bowling Association—sixty-seven in and near Adelaide and 174 in country areas, including four at Broken Hill, New South Wales. The size of clubs varied from thirty-five rinks at Bordertown to as few as three rinks, with the two largest suburban clubs being Holdfast Bay and Lockleys, each with thirty-two rinks. There are also 232 bowling clubs registered with the South Australian Women's Bowling Association, sixty-three in the metropolitan area (including seven clubs exclusively for women) and 169 in the country.

## **Swimming Facilities**

At 31 December 1975 there were eighty public swimming pools in South Australia, of which fifty-seven were in country centres. Of these only eight country and two metropolitan pools had been in use before 1950, recent activity having been stimulated by a State Government subsidy on pool construction. Of the eighty pools, seventy-four had treated water, the remainder were in lakes, dams, rivers or the sea, or utilised sea water. While mainly used for recreational and instructional purposes, the facilities provide a base for fifty-three swimming clubs providing instruction and competition in swimming, diving and water polo. These clubs have a total membership of 6 448.

Swimming pools are provided at sixty-five government schools, twenty-five of these being in country areas. Swimming facilities are also available at a number of non-government schools. The Education Department encourages school committees to build swimming pools by granting subsidies for their construction.

The Adelaide Swimming Centre in the north parklands, opened on 20 December 1969, is a complex of four pools, including a 50-metre eight lane pool, a diving/water polo pool, both of which comply fully with international competition requirements, a 20 metre by 20 metre learner's pool and a toddler's pool. The whole is contained in a 2-hectare grassed area with spectator accommodation for 2 000 people forming an amphitheatre arrangement surrounding the competitive pools.

On 22 November 1975, a \$360 000 swimming centre was opened at Renmark. The project was undertaken by the Corporation of the Town of Renmark with financial assistance from the Australian and State Governments, through the Department of Tourism, Recreation and Sport.

A new swimming complex was opened at Marion on 24 January 1976. The complex comprises 50 metre, learner's and wader's pools with associated facilities and was constructed at a cost of approximately \$900 000 by the Marion City Council. Financing of the project was on a similar basis to the Renmark pool.

The nature of Adelaide's foreshore and that of many country beaches, combined with the prevailing climate, provides ideal conditions for open sea summer bathing.

## PHYSICAL FITNESS

The National Fitness Movement began in Australia in 1939 when the Australian Government made funds available to each State for the purpose of setting up National Fitness Councils. A National Fitness Act was passed in 1941.

The National Fitness Council of South Australia, which is appointed by the Government of South Australia, has since spent what funds it has received from the Australian and South Australian Governments and other sources on the appointment of staff, securing of property and the promotion of recreation and physical fitness within the State. It has conducted training courses for community organisations and coaching courses in many games and outdoor activities as well as giving active support to groups concerned with recreation.

The Council has established and/or supported youth hostelling, the Women's Memorial Playing Fields, Outward Bound SA, the Duke of Edinburgh's Award and other youth schemes together with activities like softball, orienteering, play-grounds, scuba diving, swimming and camping. It has conducted surveys on recreation areas, sports participation, government contributions to recreation, camps and camp use and youth activities. Its publications include books and pamphlets on adventure training, physical conditioning, fitness programs, sports coaching and walking tracks.

The Council has maintained a library that contains books, pamphlets, journals, maps, plans and films on physical education, sports, recreation and health education.

On 17 July 1975 it was decided to amalgamate the National Fitness Council with the Department of Tourism, Recreation and Sport. Ultimately all the staff and property of the Council will be transferred to the Department.

## LOTTERIES AND BETTING

## LOTTERIES

The State Lotteries Act, 1966-1974 provides for the promotion and control of lotteries by the Government of the State. In November 1966 a Lotteries Commission, consisting of a chairman and two other members, was appointed to administer the Act which came into operation on 8 December 1966 and the first draw was made in May 1967.

In accordance with Section 16 of the Act all moneys received by the Commission are paid into a Lotteries Fund from which moneys are made available to meet the expenses of the Commission and to pay prizes. The balance of the Lotteries Fund, which represents the surplus of income over expenditure and prize money not claimed for over six months, is transferred to a Hospitals Fund.

Up to 31 December 1975, \$63 960 626 was received from the sale of tickets including X Lotto, of which \$38 893 868 was distributed in prize money, and approximately \$19.5 million had been transferred to the Hospitals Fund.

Originally, only one lottery, a 50 cent series was conducted but in July 1967 a Jackpot series was introduced. At the commencement, the Jackpot lottery filled in approximately six weeks; it is now being drawn every two weeks. In addition a few special lotteries have been conducted with tickets sold at \$2, \$3, \$4, \$5 or \$10 each. The last of the 50 cent lotteries was drawn on 2 July 1974 and on 3 July 1974 a 60 cent lottery was introduced.

In April 1973, a new type of lottery called 'X Lotto' (Cross Lotto) was introduced. This scheme originated in Germany after the Second World War, and is very similar to Football Pools except the subscriber selects numbers instead of teams.

Initially the popularity of X Lotto was not great but it grew towards the end of 1974. For the year ending 31 December 1975, \$5 820 139 was invested, of which 60 per cent was allocated as prize money. In October 1975 the percentage of prize money was increased to 61 per cent.

The Commission operates an account service by accepting deposits from persons wishing to invest in each lottery without the need to purchase tickets themselves. At 31 December 1975, 2 510 subscribers availed themselves of this service.

At 31 December 1975 there were 199 Lotteries Commission Agents appointed in South Australia. Of these 134 were in the Adelaide and suburban areas; fifty-three in country areas and twelve were subscriber (non-ticket selling) agents.

#### BETTING

Legalised betting in South Australia is governed by the provisions of the Lottery and Gaming Act, 1936-1975 and is restricted to horse racing, trotting, dog racing and coursing events. Betting on dog racing events was first authorised by an amendment to the Lottery and Gaming Act in December 1970.

The Act makes provision for betting with the totalisator and with book-makers at horse race, trotting and dog race meetings. The totalisator cannot be used at coursing meetings but bookmakers may operate at these meetings. Details of on-course betting and betting in registered premises are given in the table below for the years 1972-73 to 1974-75.

Betting: Amounts Invested with Bookmakers and On-Course Totalisators and Distribution of Commissions, Taxes and Fractions, South Australia

Particulars	1972-73	1973-74	1974-75
Amount invested:		\$,000	
Totalisator;			
Horse racing	6 375	7 151	9 156
Trotting	1 702	1 837	2 387
Dogs	1 556	1 744	2 186
Total	9 633	10 732	13 729
Bookmakers;			
On-course	80 557	96 017	120 771
Registered premises	2 189	2 388	3 613
Total	82 746	98 405	124 384
Total amount invested	02 270	109 137	138 113
Total amount invested	94 319	109 137	136 113
from betting transactions: State Government;		\$'000	
•	468 841 134 122	\$'000 513 1 000 130 132	695 1 297 138 172
from betting transactions:  State Government;  Totalisator tax and licences	468 841 134	513 1 000 130	1 297 138
from betting transactions:  State Government;  Totalisator tax and licences	468 841 134 122	513 1 000 130 132	1 297 138 172
from betting transactions:  State Government;  Totalisator tax and licences	468 841 134 122 1 566 753	513 1 000 130 132 1 775 904	1 297 138 172 2 302 1 260
from betting transactions:  State Government;  Totalisator tax and licences	468 841 134 122	513 1 000 130 132 1 775	1 297 138 172 2 302 1 260 1 250
from betting transactions:  State Government;  Totalisator tax and licences	468 841 134 122 1 566 753	513 1 000 130 132 1 775 904	1 297 138 172 2 302 1 260
from betting transactions:  State Government;  Totalisator tax and licences	468 841 134 122 1 566 753	513 1 000 130 132 1 775 904	1 297 138 172 2 302 1 260 1 250
from betting transactions:  State Government;  Totalisator tax and licences	468 841 134 122 1 566 753 877	513 1 000 130 132 1 775 904 977	1 297 138 172 2 302 1 260 1 250 (a) 71
from betting transactions:  State Government;  Totalisator tax and licences	468 841 134 122 1 566 753 877	513 1 000 130 132 1 775 904 977	1 297 138 172 2 302 1 260 1 250 (a) 71
from betting transactions:  State Government;  Totalisator tax and licences	468 841 134 122 1 566 753 877 —	513 1 000 130 132 1 775 904 977 —	1 297 138 172 2 302 1 260 1 250 (a) 71 2 581
from betting transactions:  State Government;  Totalisator tax and licences	468 841 134 122 1 566 753 877 —	513 1 000 130 132 1 775 904 977 —	1 297 138 172 2 302 1 260 1 250 (a) 71 2 581

<sup>(</sup>a) From 23 December 1974 totalisator fractions became payable to clubs instead of charitable institutions.

Before December 1933 legalised betting was restricted to totalisator betting at registered race meetings. From 1933 to 1967 it was limited to 'on-course' totalisators and to betting with bookmakers who were licensed to bet on courses where meetings were held, and also (from January 1934 to February 1942) with bookmakers who were licensed to bet 'off-course' in specially registered premises.

As a war-time measure racing and betting in South Australia were banned from March 1942 until October 1943. Off-course betting facilities were not re-established until 1946, when they were restricted to country areas. Port Pirie is the only town where bookmakers now operate in registered premises.

In October 1966, provision was made for the setting up of the Totalizator Agency system of 'off-course' betting, and agencies have since been established in the metropolitan area and at numerous country towns. A Board consisting of a Chairman and seven other members representative of racing and trotting interests was appointed to administer the new system and the Totalizator Agency Board (TAB) Headquarters was established in Adelaide during December 1966. The Board was enlarged during 1970-71 to include a representative of the greyhound racing interests. The TAB first operated on 29 March 1967 on a country race meeting while it operated for the first time on a metropolitan meeting on 1 April 1967.

Thirteen agencies were open on the first day of TAB operations. At 30 June 1975, 166 agencies were operating of which fifty-eight were sub-agencies operated in conjunction with other businesses. Further premises in the city, suburbs and country towns are being established progressively to provide a complete coverage of the whole State. In addition, a system of telephone betting is available to persons who have established accounts with the TAB. At 30 June 1975 the Board employed seventy-four permanent officers and 1 199 part-time staff.

For the year ended 30 June 1975 off-course investments totalled \$78 091 369 of which approximately 85 per cent was payable as dividends. The following amounts became payable to the South Australian Government (to be paid into the Hospitals Fund at the State Treasury) from the operations of the Board during that year:

	<b>3</b>
Stamp duty	3 904 570
Fractions	681 909
Unclaimed dividends	244 123
Commission on NSW (Broken Hill) investments	3 806
	4 834 408

In addition, for the year ended 30 June 1975, an amount of \$2 509 760 became available for distribution to racing, trotting and greyhound clubs under a scheme of distribution prepared by the Board and approved by the Chief Secretary. Since commencing operations in 1967 the Board has distributed a total of \$9 684 904 to participating clubs while in the same period, the South Australian Government has received \$19 440 928.

## Racecourses Development Board

The Racecourses Development Board, established under the Lottery and Gaming Act, 1936-1975, administers the Horse Racing Grounds Development Fund, the Trotting Grounds Development Fund and the Dog Racing Grounds Development Fund. These funds are financed by a proportion of investments on totalisators conducted by racing clubs or the Totalizator Agency Board and are to be applied by way of grants or interest-free loans to racing clubs for providing, erecting, improving or repairing public facilities. The Board is empowered also to borrow funds for these purposes.

## 6.5 HEALTH

## HISTORICAL

The first Health Act in South Australia was passed in 1873. This Act, which was modelled on earlier English legislation, established a Central Board of Health, and a number of town councils were constituted as local boards. The present Health Act dates from 1935. Administration continued under the authority of the Central Board of Health until 1949 when the Department of Public Health was formed to co-ordinate the work of the board and other health activities. The first hospital in South Australia was built in 1837. It was a small thatched hut situated on North Terrace and measured 6 metres by 4 metres. The foundation stone of the first Adelaide Hospital was laid in 1840. This building, which was demolished in 1938, contained two 12-bed wards and four smaller rooms. The first buildings of the present Royal Adelaide Hospital were erected in 1856-57. Hospitals in the country were established at Mount Gambier in 1869, Wallaroo and Port Lincoln in 1870, Port Augusta in 1875, and Port Pirie in 1890. The Port Adelaide Casualty Hospital was erected in 1882.

The State's first mental hospital, now demolished, was situated in Botanic Park. The Parkside Psychiatric Hospital (now Glenside Hospital) commenced operation in 1870 under the control of the Colonial Surgeon. The Enfield Receiving House and the Northfield Mental Hospital (now Hillcrest Hospital) were established in 1922 and 1929 respectively.

## ADMINISTRATION

The administration of health in South Australia is principally under the control of three main authorities: the South Australian Department of Public Health and Hospitals Department, and the Australian Department of Health. Broadly the Department of Public Health concentrates on general health matters including the prevention of disease, the Hospitals Department on hospitalisation, and the Department of Health on health on a national basis including quarantine.

The Department of Public Health embraces the activities of the Central Board of Health, the Occupational Health Branch, the School Health Branch (including

the Deafness Guidance Clinic), the Dental Health Branch, the Epidemiology Branch, the Food and Drugs Advisory Committee, the Radiological Advisory Committee, the Geriatrician, the Clean Air Committee, and also the public health aspects of the control of tuberculosis, including the Chest Clinic and the State X-ray health surveys. The Department is responsible also for health education, including the drug education program sponsored by the Australian Government, and for Aboriginal health in South Australia.

The Central Board of Health administers the Health, Food and Drugs, Narcotic and Psychotropic, Noxious Trades and Bakehouses Registration Acts. The Board also has responsibilities under the Local Government Act and the Cremation Act.

The Health Act and the Food and Drugs Act constitute every municipal or district council a local board of health or local authority for its area, except that in the metropolitan area, the Metropolitan County Board (representing twenty metropolitan corporations) is the local authority under the Food and Drugs Act. The Central Board of Health acts as a supervisory body over all the 131 local boards under the Health Act, the Food and Drugs Act and the Bakehouses Registration Act. It has concurrent jurisdiction with local boards. Outside the boundaries of local boards the Central Board is the administering authority.

The Hospitals Department administers government hospitals and supervises the work of government subsidised hospitals in South Australia.

Other State authorities concerned with aspects of public health include the Engineering and Water Supply Department which is responsible for water supply and sewerage services, and the South Australian Meat Corporation which is responsible for the functioning of the metropolitan abattoirs and for the inspection of premises used for merchandising, storing or processing of meat.

The Australian Government through the Departments of Health and Social Security is responsible for the administration of national health services in co-operation with State Health authorities and voluntary organisations. Under the Quarantine Act 1908-1969 the Department of Health is responsible for the various aspects of human, animal and plant quarantine. Persons ordered into quarantine are accommodated at Torrens Island Quarantine Station.

The South Australian Branch of the Department of Repatriation administers the medical services provided for ex-service personnel whose disabilities are accepted as being attributable to war service.

#### GENERAL HOSPITAL SERVICES

The control of hospitals in South Australia is vested in several authorities including the Hospitals Department, the Department of Repatriation, religious and charitable organisations, local community committees and private owners.

## PUBLIC HOSPITALS

The Hospitals Department administers four general hospitals in the metropolitan area, Royal Adelaide Hospital, The Queen Elizabeth Hospital, Modbury Hospital and Flinders Medical Centre which opened early in 1976. In the country there are government hospitals at Port Pirie, Mount Gambier, Port Lincoln, Port Augusta, Wallaroo and Whyalla.

In addition there are fifty-six other hospitals in country areas, conducted by local boards of management, which receive maintenance subsidies from the State Government and come under the general supervision of the Hospitals Department.

Public General Hospitals, South Australia (a)

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
Hospitals	67	68	69	70	71
Staff (at end of year): Medical:					
Permanent	402	446	479	516	568
Other (b)	623	527	597	639	607
Nursing	5 801	6 351	6 733	7 041	7 600
Attendants and others	4 684	5 139	5 704	6 315	6 505
Patients:					
Admitted and re-admitted	135 927	147 058	158 261	164 797	168 832
Average daily number resident	3 779	3 899	4 081	4 106	4 221
			\$'000		
Revenue:					
State Government aid	32 971	42 373	44 832	62 945	93 721
Australian Government $(c)$	4 367	4 331	5 213	6 098	11 507
Fees	13 471	20 079	22 258	26 246	35 799
Other	3 132	3 152	3 590	4 093	5 273
Total	53 942	69 935	75 894	99 382	146 300
Expenditure:					
â · ·	29 644	36 308	44 815	60 703	93 399
N. 4 - 1 - 4 4 -	11 818	14 196	16 543	20 782	n.a.
Buildings:	11 010	17 170	10 545	20 702	n.u.
New	10 070	16 073	10 094	13 757	n.a.
Repairs	1 784	2 122	2 713	3 234	n.a.
Total	53 316	68 699	74 164	98 476	146 265

<sup>(</sup>a) Public hospitals comprise those operated and maintained by State Government or semi-government authorities and those which receive a conditional subsidy or a regular grant from the State Government for maintenance purposes, but exclude those which receive only Australian Government hospital benefits.

<sup>(</sup>b) Includes visiting specialists paid on a sessional basis, unpaid visiting specialists and honorary consultants. Before 1971-72 for some hospitals in country districts includes general practitioners treating patients in those hospitals.

<sup>(</sup>c) Mainly hospital, pharmaceutical and tuberculosis benefits.

Public General Hospitals: South Australia, 1974-75(a)

Particulars	Royal Adelaide Hospital	Queen Elizabeth Hospital	Adelaide Children's Hospital	Other General Hospitals	Total
Staff (at end of year):		_			
Medical;					
Permanent	264	170	86	48	568
Other (b)	381	69	69	88	607
Nursing	2 382	1 206	672	3 340	7 600
Attendants and others	1 952	1 271	798	2 484	6 505
In-patients:					
Admitted and re-admitted Average daily number resident	31 595	21 874	17 984	97 379	168 832
	1 039	506	275	2 401	4 221

<sup>(</sup>a) Public hospitals comprise those operated and maintained by State Government or semi-government authorities and those which receive a conditional subsidy or a regular grant from the State Government for maintenance purposes but exclude those which receive only Australian Government hospital benefits.

# Royal Adelaide Hospital

The Royal Adelaide Hospital is a general hospital controlled by a board of three members, with the Director-General of Medical Services as Chairman. The hospital, which incorporates a department of dentistry, is a school of medical and dental instruction in conjunction with the University of Adelaide.

In addition to the main hospital there are wards at Northfield, a section of which is used to accommodate patients with infectious conditions, and a section of the Morris Hospital, Northfield is occupied by the Spinal Injuries Unit.

At 30 June 1975 there were 1 258 beds at the hospital including forty-seven in the infectious diseases wards at Northfield.

## Queen Elizabeth Hospital

The Queen Elizabeth Hospital at Woodville is a general, casualty and maternity hospital controlled by a board of management of three members. It is a University teaching hospital affiliated with the University of Adelaide for the clinical teaching of undergraduate medical students. The first section was opened in 1954 and further blocks were open in 1957 and 1959. Building extensions and additions to provide a new wing of specialist wards commenced in June 1968 and these are being progressively occupied. Extensions to the out-patients department, the operating theatres and the pharmacy were opened early in 1973.

At 30 June 1975 there were 670 staffed beds available at the hospital, including ten rehabilitation beds at the Mareeba Rehabilitation Centre, Woodville Park, about a kilometre from the main Hospital. Also at this centre is the recently established day treatment centre and domiciliary care service.

<sup>(</sup>b) Includes visiting specialists paid on a sessional basis, unpaid visiting specialists and honorary consultants.

# Modbury Hospital

The Modbury Hospital is a general hospital comprising medical, surgical, maternity and children's wards, and casualty and out-patient services. It is controlled by a board of management of seven members.

The hospital complex was designed to provide facilities for 224 beds initially but is planned to extend to 450 beds by 1981. The hospital was officially opened on 16 February 1973, with 134 staffed beds. Since that time additional beds have become available progressively and at 30 June 1975, 214 beds were in use.

## **Oueen Victoria Hospital**

The Queen Victoria Hospital, founded by public subscription, was opened in 1902. It primarily provides facilities for midwifery, neo-natal paediatrics and gynaecology and is a university teaching hospital. Controlled by a board of management the hospital is financially dependent on State Government aid. In 1974-75 State aid constituted 56·4 per cent and fees from patients 39·3 per cent of the revenue received for maintenance purposes. Accommodation at 30 June 1975 was 176 beds.

## Adelaide Children's Hospital

The Adelaide Children's Hospital, founded by public subscription in 1876, will hold its 100th Annual General Meeting in October 1976.

In 1876, the need for a children's hospital was apparent as nearly 18 per cent of children in South Australia were dying before the age of five. Dr Allan Campbell, a Scottish doctor who had immigrated to South Australia, was aware of this and in October 1876 a meeting of Adelaide citizens was held to establish a hospital for sick children.

During 1878, temporary out-patient dispensaries were established at North Adelaide and South Adelaide. In the meantime, the building of the hospital proceeded and was completed in 1879. This first hospital building was named after the then Acting Governor and Chief Justice of South Australia, Samuel James Way who was also the first President of the hospital. This building contained twenty-four beds for patients and was staffed by a matron and five nurses.

In 1955, Estcourt House, a convalescent home at Grange, was purchased by the hospital from the James Brown Memorial Trust Inc. Over the following four years, renovations and equipment for the home made it an integral part of the hospital even though it was located thirteen kilometres from the main hospital site.

In 1975, the hospital embarked on a development program which will ultimately provide additional facilities and modern wards to cope with the demands made upon its services. The hospital aims to provide a centre of excellence in child care by continuing to improve its patient care programs and providing the highly-specialised paediatric services not available elsewhere. A Research Trust has been established to provide facilities for more research work to be undertaken and to give increasing support and encouragement in this field of the hospital's work.

In 1975, the hospital's centenary year, there was more than 18 000 in-patient admissions and the number of attendances at the casualty department and outpatient clinics exceeded 148 000. The administrative, medical, nursing, paramedical and other staff exceeded 1 620 people.

Children fourteen years and under may receive in-patient and out-patient treatment. There is no means test, although there is a limited amount of accommodation for private in-patients.

The hospital provides a training school for student nurses and trainee nurses and the Department of Paediatrics of the University of Adelaide is situated at the hospital.

At 30 June 1975 there were 383 beds at the hospital.

# REPATRIATION HOSPITALS

The Department of Repatriation maintains two hospitals in South Australia, the Repatriation General Hospital, at Daw Park, and the Repatriation Hospital 'Birralee' at Belair which was previously operated as an independent unit but is now administered from Daw Park.

The Daw Park Hospital was built as a military hospital during the 1939-45 War, and came under the control of the Department in 1947. Medical, surgical and psychiatric in-patient and out-patient treatment is provided for eligible ex-service personnel, eligible dependents, serving members of the forces, and, under certain conditions, for non-eligible ex-service personnel and civilians.

In 1974 the Daw Park Private Hospital adjacent to the Repatriation General Hospital, Daw Park was acquired and developed as a Rehabilitation Centre and Day Hospital. Within the hospital's grounds is the Repatriation Artificial Limb and Appliance Centre which manufactures and supplies artificial limbs and other aids free of charge to all citizens who require them, regardless of whether they have a Repatriation entitlement or not. The average daily number of patients in the Repatriation General Hospital, Daw Park during 1974-75 was 267, and at 'Birralee' twenty-two. Staff employed in both hospitals at the end of the year was 777.

At 30 June 1975 there were 388 beds at Daw Park and 28 at 'Birralee'.

# PRIVATE HOSPITALS

Details of all private institutions approved for payment of Australian Government hospital or nursing home benefits are given in the following table.

# Private Hospitals and Nursing Homes, South Australia

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
Number of hospitals	56	53	50	51	48
	130	127	131	131	131
Number of beds at end of year: Hospitals Nursing homes	2 078	2 137	1 929	2 026	2 068
	3 236	3 382	4 286	4 512	4 741

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There are several large private hospitals in the metropolitan area including Calvary Hospital, the Memorial Hospital and St Andrew's Presbyterian Hospital, all of which are run by denominational bodies. Another large institution is the Home for Incurables at Fullarton which provides accommodation and nursing attention for persons suffering from chronic disease. Kalyra Sanatorium at Belair conducted by the James Brown Memorial Trust Inc. is the main institution for in-patient treatment of tuberculosis.

## MENTAL HEALTH SERVICES

The Director of Mental Health Services is responsible for the management of public psychiatric services operating under the Mental Health Act, 1935-1974. A division of the Hospitals Department, this Service controls four major institutions—Glenside Hospital, Enfield Hospital, Hillcrest Hospital and the Strathmont Centre—and in addition three hostels for accommodating discharged patients, two child guidance clinics, two community mental health centres and the St Corantyn Psychiatric Day Hospital.

In addition to the Enfield Hospital, there are separate 'short-term' receiving units at Glenside and Hillcrest Hospitals where treatment is directed towards early discharge. In general the duration of stay in these units is a few months terminating in either transfer as a 'long-term' patient or in discharge. A summary of the number of persons receiving Mental Health Services treatment in the years 1969-70 to 1973-74 follows.

# Government Psychiatric Institutions, South Australia

Particulars	1969-70	1970-71	1971-72	1972-73	1973-74
In-patients:					
Admitted and re-admitted	3 378	3 527	3 602	3 225	3 309
Discharged	3 243	3 433	3 486	3 023	3 230
Deaths during year	149	170	150	153	159
Remaining at end of year;					
Certified, males	541	471	403	383	308
females	454	396	336	346	327
Voluntary, males	674	726	739	765	801
females	600	600	681	714	687
Total	2 269	2 193	2 159	2 208	2 123
Out and day-patients: Treated during year;					
Males	2 134	2 149	2 109	2 245	2 534
Females	2 488	2 356	2 281	2 174	2 697
Persons	4 622	4 505	4 390	4 419	5 231

The number of in-patients remaining at the end of the year indicates a shift in emphasis from 'certified' to 'voluntary' over the period; certified patients comprised nearly 44 per cent in June 1970 compared with only 30 per cent in June 1974.

Details of diagnosis and of the number of attendances by out-patients and day-patients during 1973-74 are shown in the next table.

Out-patients and Day-patients Treated in Government Psychiatric Institutions
Diagnosis and Number of Attendances, South Australia, 1973-74

	Nu	mber of I	Patients w	ho Atten	ded	
Diagnosis	1-4 Times	5-9 Times	10-15 Times	16-22 Times	23 or more Times	Total Patients Treated
	_		MA	LES		
Senile and pre-senile dementia	10	3	-	1	2 3	16
Alcoholic psychosis	11	1	1	· —	3	16
Other organic psychoses	16	. 1		1	3	21
Schizophrenia and paranoid states	273	114	36	14	43	480
Depressive psychosis	65	28	4	1	9	107
Other functional psychoses	45	19	8	2	. 1	75
Depressive neurosis	187	51	20	8	11	277
Other neuroses and psychosomatic disorders	200	62	15	4	13	294
Alcoholism	75	7	4	4	10	100
Drug addiction	7 296	<u>-68</u>	23	8	21	416
Other personality disorders	296	00	23	٥	<b>41</b>	416
disorders of childhood	351	83	44	9	3	490
Non-psychotic mental disorders associated with	331	03	44	9.	3	490
physical condition	48	17	5	1	3	74
Mental retardation	254	17	2	i	2	266
Non-psychiatric diagnosis	46	4	ĩ	2	2	55
Total	1 884	465	163	56	126	2 694
-						
			FEM	ALES		
Senile and pre-senile dementia	23	2	2	_	2	29
Alcoholic psychosis	4	1	_			5
Other organic psychoses	29	7	3		2	41
Schizophrenia and paranoid states	253	137	39	14	28	471
Depressive psychoses	136	69	10	1	14	230
Other functional psychoses	75	43	10	2	6	136
Depressive neurosis	441	140	50	30	45	706
Other neuroses and psychosomatic disorders	222	69	25	11	22	349
Alcoholism	19	2	. 1	1	3	26
Drug addiction	8	2				10
Other personality disorders	221	59	28	9	14	331
Transient situational disturbances and behaviour	202	•	4.77	,	40	20.4
disorders of childhood	203	58	17	6	10	294
Non-psychotic mental disorders associated with	22	4	2		4	22
physical condition	23	8	2 4	*****		33
Mental retardation	181 60	8	4	1	2 2	195 74
Non-psychiatric diagnosis	60			1		/4
Total	1 898	608	195	75	154	2 930

The next table shows that for both males and females admitted or re-admitted as in-patients during 1973-74 the most common diagnosis was 'schizophrenia and paranoid states'. Females out-numbered males by more than two to one in the diagnosis categories 'depressive psychosis' and 'depressive neurosis'.

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In-patients Admitted and Re-admitted to Government Psychiatric Institutions
South Australia

Diagnosis -	197	1-72	197	2-73	197	3-74
Diagnosis -	Males	Females	Males	Females	Males	Females
Senile and pre-senile dementia	84	126	46	80	56	96
Alcoholic psychosis	39	21	48	15	63	ĵ
Other organic psychoses	31	46	45	48	32	34
Schizophrenia and paranoid states	433	354	410	380	479	345
Depressive psychosis	79	171	83	168	72	190
Other functional psychoses	71	116	80	108	92	144
Depressive neurosis	113	299	123	253	124	262
Other neurosis and psychosomatic disorders	37	69	37	54	50	50
Alcoholism	452	55	396	59	335	62
Drug addiction	9	28	16	21	31	27
Jiner personality disorders	214	220	199	185	178	183
Fransient situational disturbances and behaviour						
disorders of childhood	21	24	25	33	27	20
Non-psychotic mental disorders associated with						
physical condition	19	10	24	13	29	16
Mental retardation	195	244	129	121	175	101
Non-psychiatric diagnosis	12	10	18	- 8	15	12
Total	1 809	1 793	1 679	1 546	1 758	1 551

In-patients discharged during 1973-74 are shown in the following table in relation to the period hospitalised and the condition treated.

In-patients Discharged from Government Psychiatric Institutions Diagnosis and Period Resident, South Australia, 1973-74

		Period Resident								
Diagnosis	Under 2 weeks	2 weeks and under 1 month	1 month and under 2 months	2 months and under 6 months	6 months and over	Total Discharge:				
			MA	LES						
Senile and pre-senile dementia	5	9	3	3	6	26				
Alcoholic psychosis	20	10	12	13	7	62				
Other organic psychoses	7	-6	-5	5	5	28				
Schizophrenia and paranoid states	108	112	114	85	53	472				
Depressive psychosis	13	17	17	15	53 2	64				
Other functional psychoses	19	32	25	21	1	98				
Depressive neurosis	36	35	27	11	2	111				
Other neurosis and psychosomatic										
disorders	18	10	12	8	1	49				
Alcoholism	99	81	59	86	4	329				
Drug addiction	11	5	- 5	6		27				
Other personality disorders	78	40	36	24	18	196				
and behaviour disorders of childhood	12	3	4	3	2	24				
associated with physical condition	7	5	3	7	1	23				
Mental retardation	37	58	10	,	61	174				
Non-psychiatric diagnosis	37	1	1	1		12				
Total	479	424	333	293	166	1 695				

In-patients Discharged from Government Psychiatric Institutions, Diagnosis and Period Resident. South Australia. 1973-74 (continued)

		P	eriod Reside	ent		77-4-1
Diagnosis	Under 2 weeks	2 weeks and under 1 month	1 month and under 2 months	2 months and under 6 months	6 months and over	Total Discharges
			FEM	ALES		
Senile and pre-senile dementia Alcoholic psychosis Other organic psychoses Schizophrenia and paranoid states Depressive psychosis Other functional psychoses Depressive neurosis Other neuroses and psychosomatic disorders Alcoholism Drug addiction Other personality disorders	14 3 7 60 41 31 103 19 19	13 3 5 92 59 47 54 13 9 5	7 	6 5 7 71 30 25 31 8 16 2 27	21 3 3 42 4 5 6	61 14 35 363 188 147 259 44 58 26 189
Transient situational disturbances and behaviour disorders of child-hood.  Non-psychotic mental disorders associated with physical condition Mental retardation Non-psychiatric diagnosis	8 2 24 7	4 3 54	4 4 8 1	8 3 8	2 2 9	26 14 103 8
Total	418	410	347	247	113	1 535

# MATERNAL AND CHILD WELFARE

# MOTHERS AND BARIES HEALTH ASSOCIATION

The Mothers and Babies Health Association, a voluntary body supported by government subsidy and public subscriptions, was established in 1909 and conducts maternal and infant welfare work throughout the State. At 320 centres, triple certificated sisters teach management skills to parents of babies and infants, and some centres conduct group or individual sessions by appointment for the management of problems in the older child up to the age of five years. The Association also conducts a twenty-four hour telephone advisory service and a correspondence service for remote and isolated families. Physiotherapeutic and family management ante-natal classes are conducted, and many eight-session parentcraft courses are conducted centrally and regionally throughout each year. There is an extensive school-lecturing service on parentcraft, and advice on playgroups is provided by staff playgroup advisers.

The Association, through its Torrens House mothercraft hospital, provides the only training for mothercraft courses and infant welfare sisters in South Australia. Torrens House has forty-two beds and admits mothers with newborn babies for assistance in management and also treats babies and children up to the age of three years for various behavioural disorders. A day hospital and a model child-care centre are further facilities for placement and training.

Babies awaiting adoption and a social work service for single mothers, multi-problem families, and families-at-risk for child maltreatment, are further services provided.

Pamphlets and books on a wide range of topics of interest to parents are provided through the Association.

# HEALTH SCHOOL HEALTH SERVICES

The medical inspection of school children was first introduced into schools in 1913 and since 1951 these inspections have been the responsibility of a branch of the Department of Public Health. The dental health of school children has been the responsibility of a separate branch since 1974. The medical assessment program aims to detect health impediments which are likely to affect the progress of children at school and to provide advice on appropriate management. No treatment is carried out by the Branch. All government and non-government schools are visited, usually annually. Students in Year 1 in primary schools are medically assessed by a doctor and a sister. In addition vision and hearing are tested by a school nurse in Years 4, 6 and 8.

In 1975 school nursing positions were established in ten high schools classified by the Education Department as 'disadvantaged'. These nurses are responsible to the School Health Branch but are seconded to the schools as staff members.

With the establishment of a pre-school system by the Education Department, the School Health Branch has established a service to pre-schools, under the direction of a medical officer experienced in developmental paediatrics.

During 1975, 109 319 children were examined by medical officers or screened by nurses in 405 metropolitan and 209 country schools. Of these 10 911 required referral for treatment including 2 901 for defective vision, 2 950 for defective hearing and 3 060 for dental disorders.

Dentists using six mobile vans and dentists and therapists working in forty static clinics examined 36 534 children in 1975. Children offered treatment numbered 40 593 of which 36 534 accepted. During 1975, 8 880 children attending the schools from which the School for Dental Therapists draws its requirements were offered free dental treatment and 5 492 were examined.

There were 4 343 children examined at the Deafness Guidance Clinic including 2 216 examined for the first time in 1975; 856 of those first examined in 1975 were referred to doctors or hospitals for treatment.

An assessment clinic, under the direction of a paediatrician, began in 1971 for children with learning and behavioural problems; seventy-four children attended with their parents in that year. In 1975, 560 children were examined.

The staff of the School Health Branch at the beginning of 1975 included fifteen medical officers (four part-time), forty school nurses (one part-time), one full-time and three sessional otologists, three audio-metrists and one social worker. The staff of the Dental Health Branch at the end of 1975 included thirty-six dental officers and seventy-eight dental therapists.

## COMMUNICABLE DISEASES

Under the Health Act, 1935-1975, certain diseases have been designated as 'infectious' and others as 'notifiable'. It is required that cases of infectious and notifiable diseases be reported to the local board of health, which in turn advises the Central Board of Health, and that cases of tuberculosis, gonorrhoea and syphilis be notified directly to the Central Board. It should be noted that the figures in the following table refer to cases notified and this may not reflect the actual number of occurrences of the disease in the population.

Communicable D	isease: Cases	Notified.	South	Australia
----------------	---------------	-----------	-------	-----------

Disease	1971	1972	1973	1974	1975
Diarrhoea, infantile	47	22	13	9	28
Dysentery, bacillary	183	277	126	.31	37
Encephalitis	3	1	1 -	8	1
Gonorrhoea	817	989	1 492	2 091	2 114
Infectious hepatitis	504	630	319	193	203
Malaria	5	25	15	17	24
Meningococcal infection	10	10	10	5	4
Paratyphoid	2	5	2	3	1
Rubella	59	168	311	40	73
Salmonella infection	286	150	239	159	243
Scarlet fever	44	28	20	15	16
Syphilis	122	205	178	257	305
Trachoma	11	1	1		
Tuberculosis	137	132	124	113	101
Typhoid fever	2		2	1	2
Other diseases	18	117	19	30	69

The Department of Public Health maintains a venereal diseases investigation clinic at 275 North Terrace, Adelaide.

# **Anti-Tuberculosis Campaign**

The Department of Public Health chest clinic has complete facilities for investigation, diagnosis and treatment of individuals with tuberculosis. In addition suspected cases are investigated and contacts are advised of precautionary measures and are periodically re-examined. The chest clinic has a static X-ray unit available to individuals and to which any doctor can refer patients for routine chest X-rays. In addition there are mobile units which are used for chest X-ray surveys in metropolitan and country areas.

The tuberculosis campaign in South Australia has been successful in lowering the incidence of the disease to a level of 9.27 per  $100\,000$  of mean population. Compulsory surveys were introduced in March 1952 and have been a valuable means of detecting active cases of tuberculosis. However, with the low incidence of the disease the yield from these surveys has been progressively reduced and accordingly the frequency of the surveys has altered and become more selective.

The very low incidence of tuberculosis in the younger age groups means that it is no longer necessary to examine this group and accordingly the lower age limit for attendance at compulsory mass surveys has been raised to thirty years.

Children in Year 9 at most government and non-government schools throughout South Australia are given a tuberculin test, and where appropriate the children are given BCG vaccination.

## Prevention of Poliomyelitis

In the 1950s South Australia was affected by an intense poliomyelitis epidemic which began in 1949 and continued for several years, reaching a peak in 1951 when 1491 cases with 62 deaths were registered. From 1956, when mass

immunisation against poliomyelitis with Salk vaccine was begun, the incidence of the disease declined. The last indigenous case of polomyelitis in South Australia was recorded in 1963. Since then, one case, originating in the Northern Territory and treated in Adelaide was reported in 1970 and towards the end of 1974 a child with probable poliomyelitis was investigated at the Adelaide Children's Hospital.

The oral (Sabin) poliomyelitis vaccine was first introduced in July 1967, and is now the only vaccine used against poliomyelitis in this State. It is distributed by the Department of Public Health, to Local Boards of Health and private medical practitioners. The Department also organises poliomyelitis immunisation in areas without local government and conducts a clinic at the State Immunization Centre, Norwood.

Poliomyelitis,	South	Australia
A CHULLY CHILLY	DOGE	T HENDEN STATES

	 F	erio	od		 	 Cases Notified	Deaths
1950-54	 				 	 3 747	117
1955-59	 				 	 331	11
1960-64	 				 	 82	5
1965-69	 		• •		 	 	
1970-74	 				 	 2	
1975	 			٠.	 	 	

## ABORTION

Until December 1969 the law relating to abortions was included in Sections 81 and 82 of the Criminal Law Consolidation Act, 1935-1966. These Sections prohibited abortions under any circumstances. However, it was possible for legally qualified medical practitioners to perform abortions in a limited number of cases, at their discretion, under Common Law provisions. No separate statistics of such operations were recorded.

In December 1969 this Act was amended by the Criminal Law Consolidation Act Amendment Act, 1969 which was assented to on 8 January 1970. The amendment inserted a new section (Section 82a) which provided for certain exceptions to the prohibitions in Sections 81 and 82. These exceptions allow for termination of the pregnancy where:

- (1) it is necessary to save life, or prevent grave injury to the woman's physical or mental health; or
- (2) the continued pregnancy would involve greater risk to the mental or physical health of the woman, or there was a substantial risk that the child would suffer from such physical or mental abnormalities as to be seriously handicapped.

To qualify under these grounds, a woman must have resided in South Australia for a period of at least two months before the termination of her pregnancy.

The following tables give details of abortions notified in recent years. The incidence of abortions notified per 1 000 live births registered was 138.8 in 1973 (compared with 157.3 in the United Kingdom and 237.3 in the United States of America) 141.3 in 1974, and 145.9 in 1975.

# Abortions Notified: Grounds on Which Granted, South Australia

Correct to		1974		1975
Grounds	Num	ber Per C	ent Numbe	r Per Cent
Assault	. 10	11 4.	5 51 9 96	0·2 1·8 3·3 94·7
Total	. 285	52 100-	0 2916	100-0

# Abortions Notified: Age Distribution, South Australia

Age Group	1971	1972	1973	1974	1975
			Number		
Under 16	70	76	125	89	91
16-19	593	670	743	717	709
20-24	704	665	686	744	768
25-29	356	459	483	490	526
80-34	305	329	348	353	334
35-39	280	269	255	260	291
10-44	147	160	145	151	136
15 and over	12	24	17	18	23
Not stated	52	20	31	30	38
	2 519	2 672	2 833	2 852	2 916

# Abortions Notified: Marital Status, South Australia

Monited Ctatus	19	74	1975		
Marital Status	Number	Per Cent	Number	Per Cent	
Single	1 149 25	49·4 40·3 0·9 9·4	1 455 1 106 27 308 20	49·9 37·9 0·9 10·6 0·7	
Total	2 852	100.0	2 916	100-0	

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# Age-specific Abortion Rates, South Australia(a)

20-24     14-52     13-66     13-82     14-7       25-29     9-24     10-81     10-70     10-3       30-34     9-05     9-50     9-71     9-5       35-39     8-92     8-34     7-78     7-7       40-44     4-24     4-68     4-36     4-5       45-49 (c)     0-33     0-66     0-47     0-5       Total rate     8-99     9-41     9-78     9-6	ıp	)	1971	1972	1973	1974	1975 <i>p</i>
			14·52 9·24 9·05 8·92 4·24	13·66 10·81 9·50 8·34 4·68	13·82 10·70 9·71 7·78 4·36	14·49 14·74 10·31 9·53 7·75 4·58 0·50	14·05 14·92 10·79 8·59 8·52 4·13 0·65
			8.99	9.41	9.78	9.63	9.66
Ratio (d) $109.54$ $122.32$ $138.82$ $141.3$			109·54	122-32	138.82	141.32	145-90

- (a) Abortions notified per 1 000 of female population in each age group.
- (b) Includes abortions to females less than 15 years of age.
- (c) Includes abortions to females greater than 49 years of age.
- (d) Abortions per 1 000 live births.

Under the amended Act (the Criminal Law Consolidation Act, 1935-1975), a legally qualified medical practitioner may perform an operation to terminate a pregnancy, provided that he and another legally qualified medical practitioner are both of the opinion that one of the above grounds is met. There is provision for one legally qualified medical practitioner to terminate the pregnancy without recourse to a second opinion where it is immediately necessary to save the life, or to prevent grave injury to the physical or mental health of the pregnant woman. All operations must be performed in hospitals prescribed under regulations to the Act.

#### OTHER HEALTH SERVICES

#### **Blood Transfusion Service**

The Red Cross Blood Transfusion Service collects and processes blood for the routine and emergency needs of all hospitals in South Australia. Blood donations are given at the Service's centre in Adelaide, at a mobile unit visiting metropolitan and country centres, and at regional centres. In 1975 over 84 000 individual donations were received.

The Service maintains a blood bank at the Royal Adelaide Hospital, and a reference laboratory which, in addition to performing the necessary tests on donor blood, carries out investigations for hospitals and medical practitioners. There are subsidiary blood banks at the Queen Elizabeth Hospital, the Repatriation General Hospital, Modbury Hospital and the Lyell McEwin Hospital, Elizabeth, and regional blood transfusion centres have been established at Mount Gambier, Whyalla, Berri, Port Lincoln and Wallaroo.

The cost of maintaining the Blood Transfusion Service is met by the State Government (60 per cent), the Australian Government (35 per cent) and the Red Cross Society (5 per cent).

# Home Nursing

The Royal District Nursing Society of South Australia Incorporated, through its forty-four branches in metropolitan and country districts, provides nursing facilities to those in need of home nursing. The services of the fully trained nursing staff are provided free of charge to those unable to afford a fee, and to others according to their means. During 1974-75 a total of 325 599 visits were made by 120 full-time nurses. The Society also maintains a hospital at Marree and a medical centre at Iron Knob.

The Society obtains its revenue from State and Australian Government aid (83 per cent of total revenue in 1974-75), branch maintenance, including payments from patients, local government and other sources (15 per cent), and legacies and donations (2 per cent).

# Aerial Medical Services

The Royal Flying Doctor Service (RFDS) of Australia is a non-profit organisation and provides medical, dental, ophthalmic, School of the Air and telegram services in remote areas of Australia. The Royal Flying Doctor Service of Australia (SA Section) Inc. of the RFDS operates over an area of approximately 2 124 000 square kilometres in South Australia and the Northern Territory; it administers control stations at Port Augusta, and Alice Springs in the Northern Territory, two aircraft being based at Port Augusta and one at Alice Springs. For the year ended 30 June 1975 these aircraft flew a total of 409 690 kilometres in transporting 627 patients to hospital and treating 2 137 patients at outback clinics. A further 505 patients received dental treatment from Adelaide dentists on regular monthly visits. Doctors gave 5 050 radio consultations to outback residents and 66 859 telegrams were transmitted from 464 licensed fixed and portable outstations.

No flying charges are made to patients and the Service relies on donations, bequests and similar sources for approximately one-third of the finance required and two-thirds from State and Australian Government grants.

# **Ambulance Services**

The St John Council for South Australia Inc. provides a full-time ambulance service in the metropolitan area manned by the St John Ambulance Brigade. The Council also has administrative oversight over ambulance operations in country areas and in most cases the vehicles are manned by the Brigade. In the metropolitan area during 1975 St John ambulances travelled 2 281 867 kilometres and carried 186 279 patients. Three aerial ambulances, based at Whyalla and at Adelaide, flew 1 545 hours in 1975. These aircraft are fitted out on the same basis as road ambulances and all the equipment throughout the State is interchangeable. A mobile radio communication system operates throughout the State on standard frequencies.

Common training programs are based on a Manual of Casualty Care and Transport published by the St John organisation in Adelaide. The establishment of a branch of Medic Alert International, a United States organisation, has facilitated the identification of people suffering from diseases and allergies which are not readily apparent. This knowledge is of assistance to both ambulance and hospital staffs in handling and treating patients.

# Voluntary Agencies

There are many other voluntary bodies operating in South Australia and doing health work of a special nature. Their activities cover such fields as care of the handicapped, hospital services, care of mother and baby, care of the aged and the provision of convalescent facilities.

# STATE GOVERNMENT EXPENDITURE ON PUBLIC HEALTH

The following table shows the net expenditure by the State Government from Consolidated Revenue Account on various aspects of health which is defined as excluding sewerage, drainage and water supply. The dissection given is based on a revised classification of the purposes of government: figures now shown will therefore differ in content from those previously published. The figures include both the cost of maintaining State Government activities and subsidies paid to other organisations active in this field. For further details see Part 11.3 State Government Finance.

Receipts and Outlay on Health, South Australia (a) 1974-75

		Outla		Receipts (b)	
Purpose	Purchases of Goods and Services	Current Grants to Private Non- Profit Organisations	Services	Total (Including Other)	Total (c)
			\$'000		
General administration, regulation and research	7 872	22	247	7 759	95
Mental health	19 784 388	518 	2 778 16	17 697 380	86
Other hospital and clinical services Other health services:	87 756	935	22 270	68 227	1 952
Preventive services	1 013	35 1 405	_	1 061 1 485	119
Domiciliary care	343 1 729		<sup>65</sup>	278 1 795	537 891 659
Community health facilities Ambulance services Other	846 — 856	895 1 662	=	846 895 ( <i>d</i> )8 140	365
Total	120 587	5 472	25 376	108 563	4 704

- (a) Consolidated Revenue Account only: excludes operations of subsidised hospitals.
- (b) Charges for goods and services supplied have been excluded from receipts and deducted in calculating outlay.
- (c) Mainly grants from Australian Government.
- (d) Includes \$539 200 transferred to Institute of Medical and Veterinary Science.

## CREMATORIUMS AND CEMETERIES

The first crematorium in South Australia, the Adelaide Crematorium, was erected by the Cremation Society of South Australia, presented to the State Government in 1903 and subsequently was closed in November 1959. Cremations

are currently conducted at two cemeteries in the State. The Centennial Park Crematorium was erected in 1956 and is operated by the Centennial Park Cemetery Trust. A second crematorium, constructed by the Enfield General Cemetery Trust, commenced operations in December 1969. There were 3 797 cremations in South Australia during 1975.

Cemeteries in South Australia are divided into three main groups: those under the control of the State Government or local government authorities, those under church control and those under the control of trusts. In each of the above groups the cemeteries are financed by the usual charges for burials and by the leasing of land for burial purposes. With church and trust cemeteries, the cost of maintenance is often derived from interest accruing from invested capital funds.

## MEDICAL PERSONNEL

The following table lists registrations with the Medical, Dental, Pharmaceutical, Physiotherapy, Chiropodists, and Nurses Boards of South Australia, and with the Board of Optical Registration.

# Professional Medical Personnel, South Australia Number Registered at 31 December

Profession	1970	1971	1972	1973	1974
Medical practitioners (a)	2 568	2 707	3 054	3 154	3 348
Dentists	389	414	442	477	521
Pharmaceutical chemists	921	891	903	1 017	969
Opticians	89	90	94	96	95
General nurses $(b)$	9 855	10 506	11 201	11 923	12 717
Enrolled nurses	1 752	2 255	2 740	3 406	3 641
Midwives	3 837	4 040	4 265	4 470	4 787
Psychiatric nurses	708	771	830	865	955
Mental deficiency nurses	444	444	464	483	519
Infant welfare nurses	575	603	629	657	690
Mothercraft nurses	116	145	175	198	220
Infectious diseases nurses	37	34	34	33	34
Dental nurses	120	122	142	156	169
Physiotherapists	452	475	498	524	565
Chiropodists (c)	155	158	152	150	144

<sup>(</sup>a) Includes personnel not practising in South Australia. Date of registration is 31 January in following year.

The figures for registered medical practitioners show the number of persons registered to practise medicine in South Australia and not the number actually practising, which is estimated at approximately two-thirds of those registered.

<sup>(</sup>b) General nurses may also be registered and included as midwives, psychiatric nurses, mental deficiency nurses, etc.

<sup>(</sup>c) Date of registration is 1 July.

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Since the 1939-45 War there has been a considerable re-organisation of general practice in medicine with a movement away from single practices to partnership and group practice arrangements.

# MEDICAL RESEARCH

# The Institute of Medical and Veterinary Science

Details of this organisation are given under the heading of Scientific Organisations on pages 234-5.

## The Anti-Cancer Foundation

The forerunner of the Foundation, the Anti-Cancer Campaign Committee, was formed within the University of Adelaide in 1928. The Committee's early activities were largely devoted to establishing and developing the Radiotherapy Department of the Royal Adelaide Hospital. As demand for these facilities grew the hospital assumed responsibility for routine treatment, and the Committee concentrated its activities on cancer research. In 1962 the Committee was re-organised and became the Anti-Cancer Foundation of the University of Adelaide.

Early research was of a clinical nature, but more recently the Foundation has subsidised cancer research projects within the Institute of Medical and Veterinary Science, the Flinders University of South Australia, the University of Adelaide, the Queen Elizabeth Hospital and the Royal Adelaide Hospital.

An education program is being conducted to encourage the public to seek early medical advice and prompt treatment. Social workers assist with problems associated with cancer patients being cared for at home by relatives who, in necessitous circumstances, receive financial help. The Foundation has established 'Martin House' a well-equipped hostel to accommodate country patients receiving treatment at the Royal Adelaide Hospital.

The income of the Foundation is derived from gifts and bequests, government grants and subsidies, and from direct public appeals. The Foundation has formed standing committees in the country districts of South Australia and the Northern Territory to assist in the expansion of its anti-cancer activities.

# The National Heart Foundation

The National Heart Foundation of Australia and its South Australian Division was established in 1959. Its aims are research into the causes of heart and arterial diseases, the rehabilitation of patients suffering from heart and arterial diseases, and the education of doctors and the general public in all aspects of cardio-vascular problems with particular emphasis on prevention and risk factors. The National Heart campaign of 1961 raised \$5 124 000 for the work of the Foundation, of which \$662 000 was contributed in South Australia. An appeal for further funds which was made during 1969 raised \$268 000 in South Australia. Since then, the Heart Fund Continuing Support Program has been established with the aim of providing regular annual donations to support the three-part program.

The campaign funds are being spent on research (70 per cent), education (15 per cent) and rehabilitation (15 per cent). Research funds, distributed at the national level, support projects in various departments at the University of Adelaide, at Flinders University, and at the Institute of Medical and Veterinary Science, the Royal Adelaide Hospital and the Adelaide Children's Hospital. Research funds are also used in providing local and overseas fellowships and travel grants.

The National Heart Foundation Centre, Adelaide was established by the South Australian Division in 1963 for the rehabilitation of patients suffering from the effects of heart disease. Particular attention is given to professional and community education and to placement in suitable employment.

## HEALTH SERVICES USAGE IN SOUTH AUSTRALIA

As part of the February 1972 population survey conducted by the Australian Bureau of Statistics, data was obtained and used to derive measures of some characteristics of the incidence and distribution of health services used or required by one per cent of the population of South Australia during 1971. Details of this survey can be found in the Survey of the Use of Health Services bulletin published by the Deputy Commonwealth Statistician, Adelaide. Some findings of this survey, expanded in accordance with accepted statistical principles to represent the population of the State as a whole, were included on pages 279-81 of the South Australian Year Book 1974.

# 6.6 SOCIAL WELFARE

The Australian and State Governments and a large number of voluntary agencies see to the social welfare of the population. The Australian Government is concerned largely with providing fixed monetary pensions and benefits and repatriation services. It also provides, either directly or through State and local government authorities and voluntary agencies, for a wide range of welfare services for people with special needs. State agencies operate in the field of child welfare and distribute emergency relief in circumstances where Australian Government assistance is not available. The voluntary agencies, many of which receive government aid, provide a wide range of services in various fields of social welfare.

# AUSTRALIAN GOVERNMENT PENSIONS AND BENEFITS

# **EXPENDITURE**

The following table sets out Australian Government expenditure in South Australia on social security, which includes expenditure under the Social Services Act, other Acts, National Health Service and disability and service pensions but the figures do not include administration costs.

# Australian Government Expenditure on Social Welfare, South Australia(a)

Type of Benefit	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Social Services Act: Age and invalid pensions Widows pensions Child endowment (b) Maternity allowance Unemployment benefits Sickness benefits Supporting mother's benefit Other	64 714 8 969 18 284 718 1 378 840 — 1 047	76 545 10 458 19 766 707 2 930 1 243 — 1 237	101 625 14 364 22 780 661 5 107 2 226 — 1 467	131 771 18 403 20 098 618 6 143 3 633 4 838 1 952	184 218 23 873 20 237 627 20 475 4 855 9 293 3 196
Total	95 950	112 886	148 230	187 456	266 772
Delivered Meals Subsidy Act Aged Persons Homes Act (c) Aged Persons Hostels Act (d) States Grants (Home Care)	43 3 187 —	48 2 671 —	78 3 608 106	166 4 221 865	172 5 632 753
Act	294 41 773	106 464 50 587 17 307 5 186	776 57 254 18 450 7 467	226 1 534 65 807 21 010 10 340	942 1 045 82 942 26 641 15 133
Total payments	161 687	189 255	236 150	291 625	400 034

<sup>(</sup>a) Where applicable the amounts shown include payments for supplementary assistance, allowances and additional pensions for children.

# AUSTRALIAN SOCIAL SECURITY

Brief details of Australian Government pensions and benefits are given in this section; however, in discussing the eligibility of persons for the various payments, all the necessary qualifications and exceptions to the general rule have not been delineated; such terms as 'income' and 'property' have not been defined.

# Age and Invalid Pensions

Age pensions are payable to men aged sixty-five and over and women aged sixty and over, who have lived in Australia continuously for a period of ten years.

Invalid pensions are payable to persons aged sixteen years and over who are permanently incapacitated to an extent of at least 85 per cent, or are permanently blind. Where the incapacity or blindness occurred outside of Australia, other than during a temporary absence, ten years continuous residence is necessary.

<sup>(</sup>b) Payments are made to claimants' bank accounts every twelve weeks. Five payments were included in 1972-73, other years include four payments.

<sup>(</sup>c) Includes Personal Care Subsidy (\$1 101 000 in 1974-75).

<sup>(</sup>d) Commenced September 1972.

<sup>(</sup>e) Includes Northern Territory for some items (see page 294).

<sup>(</sup>f) Includes Northern Territory.

If a person subject to the ten year qualification for either pension has completed five years but not ten years continuous residence, but has lived in Australia for periods which, in total exceed ten years, he may be eligible. Residence in New Zealand, the United Kingdom or an Australian external Territory (except Norfolk Island) may be treated as residence in Australia. Absences from Australia may, in certain circumstances, be treated as residence.

From November 1975, for both age and invalid pensions, the standard rate for an unmarried pensioner, or for a married pensioner whose husband or wife was not receiving an age or invalid pension, a tuberculosis allowance or a service pension, was \$38.75 a week. Where married pensioner couples are living apart for an indefinite period because of the illness or infirmity of either or both, each receives a pension at the single rate. The married rate for a couple both being pensioners was \$32.25 a week each. A wife's pension is payable, subject to a means test, at the married rate to an age or invalid pensioner's wife who does not qualify for an age, invalid or repatriation service pension in her own right.

An additional pension of 57.50 a week is payable for all children under sixteen years or who are full-time students. An unmarried age or invalid pensioner having the custody, care and control of a child under sixteen years or who is a full-time student is paid a guardian's allowance of \$4 a week in addition to the pension. The guardian's allowance is increased to \$6 a week if there is a child under six years, or if there is an invalid child under sixteen years requiring full-time care and attention.

Up to \$5 a week extra may be paid to a single pensioner or to a married couple (\$2.50 each) who pay rent or lodging. For single and married persons the maximum rate of supplementary assistance is reduced by the amount by which the pensioners' means exceed \$1 a week.

Age,	Invalid	and	Wife	P	ensions,	South	Australia
		Nun	ıber (	of	Pension	iers	

	At 30 June Age Pensioners Invalid Pensioners							Wife Pensioners
	t 50 Julie -	Males	Females	Total	Males	Females	Total	Total (a)
1971 1972 1973 1974 1975		24 429 27 745 31 510	54 315 56 210 63 250 69 792 73 404	77 762 80 639 90 995 101 302 107 279	6 151 6 643 7 441 8 425 9 703	5 023 5 489 5 914 6 390 6 645	11 174 12 132 13 355 14 815 16 348	1 884 1 957 3 740 4 529 4 972

<sup>(</sup>a) Wife's pension became payable from 5 October 1972. Wife's allowance was payable before that date.

Age, invalid and wife's pensions, unless the pensioner is seventy years of age or over or permanently blind, are subject to a means test. Additional allowances are generally subject to a means test regardless of age. Under the means test, a full pension is paid if the annual income plus one-tenth of the value of property in excess of \$400 (for a single pensioner) or \$800 (for a pensioner couple)

does not exceed \$1040 (for a single pensioner) or \$1794 (for a pensioner couple). If the combined income and property figure exceeds \$1040 (or \$1794), the annual rate of pension is reduced by half the excess.

Certain types of income are exempted. The main exemptions are: income from property; gifts or allowances from children, parents, brothers or sisters; benefits from friendly societies; child endowment or other payments for children; Australian Government health benefits and amounts received from registered benefit organisations. A special concession is also made available to recipients of superannuation pensions and annuities.

Similarly, certain types of property are disregarded. They include the permanent home of the pensioner, his furniture and personal effects, the surrender value (up to \$1 500) of life insurance policies, the capital value of annuities or contingent interests, and the value of reversionary interests.

#### Widows Pensions

Widows pensions are paid to widows and other women who satisfy certain conditions; there is a means test on income and property.

There are three classes of pensions:

- Class A, a widow with at least one dependent child who is a child of the widow or a child who entered her care before she became a widow;
- Class B, a widow of at least fifty years of age who has no child or, if she has a child, the child does not qualify her for a Class A pension and a widow of at least forty-five years of age whose Class A pension ceases because she no longer has a qualifying child;
- Class C, a widow under fifty years of age who has no child and is in necessitous circumstances within twenty-six weeks of her husband's death.

For Classes A and B the term 'widow' includes a deserted wife who has been deserted at least six months, a divorcee, a woman whose husband has been in prison at least six months and a woman whose husband is in a mental hospital.

For all classes the term 'widow' may also include a woman who was the common law wife of a man for at least three years immediately before his death. 'Child' includes a full-time student over the age of sixteen.

Widows	Pensions,	South	Australia
Number	of Pensio	ners At	30 June

Class	1971	1972	1973	1974	1975
A	4 623 4 415 2	4 898 4 459 6	5 910 5 111 2	6 297 5 448 8	6 154 5 662 6
Total	9 040	9 363	11 023	11 753	11 822

A residential qualification is not required if a couple were permanent residents when the husband died or if an event occurs—such as divorce—which qualifies a woman as a 'widow'. In other circumstances five years continuous residence immediately preceding a lodgement of claim or ten years residence at anytime is required. Certain absences are not considered as breaking continuity of residence, and residence in New Zealand, the United Kingdom or an Australian external Territory (except Norfolk Island) counts as residence in Australia. The means test operates similarly to that for age pensions except that for a Class A widow the property component is relaxed to some degree.

From November 1975, the rates of pension were: Class A widows, \$38.75 a week, plus a mother's allowance of \$4 a week (\$6 if there is an invalid child or a child under six years), plus \$7.50 a week for each child under sixteen years or a full-time dependent student; for Class B widows, \$38.75 a week; for Class C widows, \$38.75 a week.

An additional payment of up to \$5 a week may be paid to widow pensioners who pay for rent or lodging, whose income is under \$6 a week and whose assets are also limited. In the case of a Class A widow the income limit may be increased by up to \$6 a week for each child.

# Supporting Mother's Benefit

A supporting mother's benefit is payable to an unmarried mother, a mother who is a deserted *de facto* wife, a *de facto* wife of a prisoner or a separated wife, from a date six months after the event which gives rise to eligibility (e.g. the birth of a child or separation). The rates, means test and other conditions are the same as for a Class A widows pension.

## **Portability**

Pensions may be received in any country, subject to the following conditions:

- (1) the pension must be granted before departure from Australia;
- (2) normal residential requirements must be satisfied;
- (3) payment can only be made if the pensioner has left Australia on or after 8 May 1973.

# Persons Living Overseas

Pensions may be granted to persons living outside Australia subject to the following conditions:

- (1) the claimant had lived thirty years in Australia and was of age-pension age or within five years of that age at the time of departure from Australia. This residential qualification does not apply to a claimant who became permanently incapacitated for work (or permanently blind) or widowed, in Australia;
- (2) the claimant left Australia before 8 May 1973;
- (3) the claimant is in special need of financial assistance.

In addition, the claimant is required to satisfy the ordinary conditions for grant of pension in Australia, except that of living in Australia.

#### Child Endowment

Persons resident in Australia who have the custody, care and control of one or more children under the age of sixteen are eligible for child endowment; approved institutions of which children are inmates are similarly eligible. Endowment is also paid for full-time students between the ages of sixteen and twenty-one years. There is no means test on child endowment, but one year's residence in Australia is required if the mother and child were not born in Australia; this requirement is waived if the Department of Social Security is satisfied that they are likely to remain in Australia permanently.

At 31 December 1975 endowment was paid at the rate of 50 cents a week for the first eligible child under sixteen years; \$1 for the second; \$2 for the third; and for each subsequent eligible child the rate increases by 25 cents a week over that payable for the next elder child i.e.  $$2 \cdot 25$  for the fourth;  $$2 \cdot 50$  for the fifth etc. Endowment of \$2 a week is paid for each child under the age of sixteen years in an institution, and  $$1 \cdot 50$  a week for each full-time student between the ages of sixteen and twenty-one years.

		Families		]		T-4-1	
At 30 June			Approved	Endowed	Children	Total Endowed Children	
30 June	Families (a)	Under 16	Students 16-20		Under 16	Students 16-20	Cimaren
1971 1972 1973 1974 1975	174 976	361 652 362 830 361 539 361 853 364 047	21 869 23 306 24 068 23 361 25 625	63 64 67 67 68	1 294 1 545 1 203 1 745 1 045	145 145 120 116 150	384 960 387 826 386 930 387 075 390 867

Child Endowment, South Australia

# **Double Orphans Pension**

A pension of \$11 a week is payable to the guardian of a child under sixteen years or a full-time student between the ages of sixteen and twenty-one years who has both parents dead or one dead and the other missing. The benefit is also payable in respect of either an adopted child or a child whose sole surviving parent is a long term inmate of a prison or mental hospital.

If an orphan child is being cared for by an approved charitable or religious institution the pension may be paid to the institution.

# Maternity Allowances

Any woman, permanently resident in Australia, who gives birth to a child in Australia, is entitled to a maternity allowance. The amount payable depends on the number of existing children under sixteen years of age, and special allowance is made for multiple births. Maternity allowances are not subject to a means test.

<sup>(</sup>a) Excludes those with only endowed student children.

At 31 December 1975 a mother with no other children under sixteen years of age was entitled to an allowance of \$30; where there were one or two such children the rate was \$32, and where there were three or more such children \$35. An extra amount of \$10 is paid for each additional child in multiple births.

# Maternity Allowances, South Australia (Claims granted during year)

Category	1970-71	1971-72	1972-73	1973-74	1974-75
Single births:					
No other children under 16	8 890	8 975	8 576	8 105	8 433
One or two children under 16	10 796	10 693	10 266	9 678	10 012
Three or more children under 16	2 740	2 467	1 984	1 604	1 414
Multiple births:					
Twins	247	251	175	204	180
Triplets		4	1	4	2
Quadruplets		<del></del> -		1	_
Total	22 676	22 390	21 002	19 596	20 041

# Handicapped Child's Allowance

A handicapped child's allowance was introduced in December 1974. The allowance is payable at the rate of \$10 a week to the parent or guardian of a child under sixteen years of age who is severely handicapped physically or mentally and requires constant care and attention in the family home.

#### Unemployment and Sickness Benefits

Unemployment and sickness benefits are paid to persons who suffer temporary loss of regular earnings because of unemployment, sickness or accident. There is a means test on income but not on property. Persons eligible must be between sixteen and sixty-four years of age (fifty-nine for women) with either twelve months residence or the intention to reside permanently in Australia. A person receiving an alternative social security pension is ineligible for unemployment and sickness benefits. A married woman is not usually qualified to receive sickness benefit if her husband can support her.

To qualify for unemployment benefit a person must (a) be unemployed and be able to show that unemployment was not because of his being a direct participant in a strike, (b) be able and willing to undertake suitable work, and (c) have taken reasonable steps to secure work, including registration with the Commonwealth Employment Service.

The amount of income which a person may receive and still qualify for the maximum rate of benefit is \$6 a week for an adult or married person under twenty-one, and \$3 a week for a single person under twenty-one. The benefit is reduced by any amount in excess of these figures. For unemployment benefit the income of the claimant's husband or wife is taken into account. In the case of sickness benefit, income received by a claimant's wife is not included for means test purposes but may determine whether additional benefit is payable for her, and if so, the amount. Special conditions apply where the wife receives an age, invalid or service pension.

From November 1975 the maximum weekly amounts for sickness and unemployment benefits were \$38.75 for a single person aged eighteen and over and \$64.50 for a married couple plus 7.50 for each child. The rate for single persons aged over sixteen years but under eighteen years is \$36 a week.

There is a waiting period of seven days during which unemployment or sickness benefit is not payable, but this waiting period is not required more than once in any period of thirteen weeks.

# Unemployment and Sickness Benefits, South Australia

Year	Unemployment		Sickne	ess	Special (a)		
rear	Number of	Average	Number of	Average	Number of	Average	
	Benefits	Number on	Benefits	Number on	Benefits	Number on	
	Granted	Benefit (b)	Granted	Benefit (b)	Granted	Benefit (b)	
1970-71	20 015	2 025	6 603	868	1 063	286	
1971-72	30 308	3 515	7 325	1 059	1 021	265	
1972-73	31 111	4 423	7 585	1 388	1 042	283	
1973-74	19 926	3 244	8 639	1 571	988	313	
1974-75	61 944	10 557	9 311	1 978	1 125	373	

- (a) Excludes special benefits to migrants in accommodation centres.
- (b) Average number at the end of each week.

# Supplementary Assistance Allowance

Supplementary assistance is payable, subject to a means test, to an age, invalid, wife or widow pensioner, or a woman receiving a supporting mother's benefit if he or she pays rent or lodging and has little or no means apart from the pension or benefit. A similar payment, known as supplementary allowance, of up to \$5 a week may be made to a sickness beneficiary who has received benefit for a continuous period of six weeks.

A special benefit may be granted to a person not normally qualified for unemployment or sickness benefit and who is not in receipt of some other social service pension or allowance, or a service pension, if he is unable to earn a sufficient livelihood for himself and his dependants.

## **Special Benefits**

After Cyclone Tracy struck Darwin on 24 December, 1974 the Department of Social Security began paying special assistance grants, equivalent to two weeks' special benefit, free of means test to Darwin residents. Payment was made to evacuees upon their arrival at emergency reception centres throughout Australia.

Since 6 February 1975 special benefits were paid subject to the normal unemployment or sickness benefit conditions as applicable under the standard benefit payment procedure.

## Rehabilitation

The Australian Government Rehabilitation Service assists people who are unable to work because of long-term disability or who have had to give up their employment because of sickness or injury. It aims at helping disabled people to reach their maximum physical, mental and social usefulness and to prepare them for suitable employment. The service provides a co-ordinated program of treatment and training to meet the special needs of each disabled person.

Rehabilitation is provided free to persons receiving, or eligible to receive, an invalid or widows pension, unemployment, sickness or special benefit. Also eligible are: recipients of a tuberculosis allowance; persons aged fourteen or fifteen who, without treatment or training, would be likely to qualify for an invalid pension at age sixteen; national servicemen and members of the permanent forces who are disabled at time of discharge but are ineligible for rehabilitation assistance from the Department of Repatriation and persons who become disabled while working for the Australian Government and are covered by the Compensation (Australian Government Employees) Act 1971-1973.

Persons from these groups are selected for rehabilitation if their disability is a substantial handicap for employment but can be overcome by treatment or training, and if there is a reasonable prospect that they will be able to start work following rehabilitation. Disabled persons who do not qualify for the free service may pay for rehabilitation themselves, and provision is made for charges to be reduced in accordance with a person's ability to pay. Private or government organisations may also sponsor rehabilitees.

Reha	hilitation	1. South	Australia

Year	Number Accepted for Rehabilitation	Number Placed in Employment	Expenditure (a)
			\$
1970-71	280	223	394 448
1971-72	208	188	470 521
1972-73	301	201	542 492
1973-74	258	203	709 355
1974-75	319	171	982 168

<sup>(</sup>a) Excludes capital expenditure on sites and buildings, and administrative cost of the Rehabilitation Service.

The Training Scheme for Widow Pensioners (TSWP) which helps widow pensioners to acquire a vocational skill to enable them to undertake full or part-time employment was incorporated into the National Employment and Training System (NEAT).

Widow pensioners undergoing training with the TSWP were informed of the transfer to the NEAT system but where it appeared that a widow pensioner would be disadvantaged from transfer to NEAT, arrangements were made to allow trainees to complete their training under TSWP.

Training	Scheme	for	Widow	Pensioners,	South	Australia

Year	Number Accepted for Training	Number Placed in Employment	Expenditure (a)
1970-71	278 266 461	70 119 164 204 99	\$ 68 164 92 353 72 677 129 522 81 429

<sup>(</sup>a) Excludes administrative costs of the Training Scheme.

#### **Funeral Benefits**

A funeral benefit of up to \$20 is payable to any person liable for the funeral costs of a deceased age or invalid pensioner. A higher benefit of up to \$40 is payable to an age, invalid, wife or widow pensioner, or a woman in receipt of supporting mother's benefit, liable for the funeral cost of a deceased spouse, child or another such pensioner or beneficiary. For these benefits 'pensioner' means a person who satisfies the Australian Government pensioner 'fringe' benefits means test. 'Deceased pensioner' also refers to a person who satisfied those conditions before his death.

During 1974-75, 5 164 claims for funeral benefits were granted in South Australia.

# Homes for the Aged

The Aged or Disabled Persons Homes Act 1954-1974 provides that grants may be made to certain organisations towards the capital cost of erecting or purchasing approved homes for aged or disabled people. Religious, charitable, ex-servicemen's organisations and local government bodies as well as any other approved organisation are eligible. Since December 1974, the grants have been made on the basis of \$4 for each \$1 (excluding government assistance and borrowed money, except that borrowed by local government bodies) raised by an organisation.

At 30 June 1975, 635 grants had been approved in South Australia since the inception of the scheme in 1954. The amount granted, \$39 906 698, was associated with the accommodation of 10 339 persons.

Since October 1969, a personal care subsidy has been provided in terms of this Act, to eligible organisations providing personal care services in hostel-type accommodation for persons of eighty years of age and over. In 1974, the subsidy was increased to \$15 per week, and the cover extended to persons who, though not yet eighty years of age, required personal care services.

Under the Aged Persons Hostels Act 1972-1975 (expired 26 September 1975), the Australian Government introduced a three year program for the purpose of providing additional hostel accommodation. The legislation provided for the Australian Government to meet building costs up to a maximum of \$11 700 per person and supply \$250 per person for furnishings and a further

\$2 400 per person for land purchased since September 1972. The extent of an organisation's projected use of this entitlement was related to whether its existing facilities were subsidised or not.

The States Grants (Home Care) Act 1969-1973, which is administered by the Australian Department of Social Security, provides for financial assistance to the States to assist them in developing senior citizens' centres and a range of home care services providing housekeeping or other domestic assistance for aged persons in their homes. Payments to South Australia up to 30 June 1975 amounted to \$684 983 for senior citizens' centres and \$782 346 for home care services.

## **Delivered Meals Service**

Under the *Delivered Meals Subsidy Act* 1970-1975, financial assistance is provided to organisations to establish, maintain, expand and improve 'meals on wheels' services. These organisations must be non-profit charitable, benevolent or welfare bodies not controlled by the Australian or State Governments. The basic rate of subsidy is 30 cents for each meal with which an approved vitamin C supplement is provided, and 25 cents for all other eligible meals.

At 30 June 1975 approvals had been given to nineteen metropolitan and thirty-three country meals services which had served a total of 2 899 090 meals since the scheme's inception and the total amount of subsidy paid was \$546 059.

# Homeless Persons' Assistance

The Homeless Persons' Assistance Act 1974 provides for assistance to non-profit organisations and local government bodies which provide accommodation, food and social welfare services for homeless men and women.

The Act enables grants to be made to eligible organisations to meet the cost of purchasing, constructing, altering or renting buildings to be used as homeless persons assistance centres, as well as to meet the cost of purchasing and installing furniture and equipment for such centres. Grants also meet half the salary of a social welfare worker employed at a centre, and help to meet the cost of providing food and accommodation for homeless persons at an approved centre, or of meals provided at such centres for non-residents. The rate of the food and accommodation subsidy has been prescribed at 75 cents per day and the rate of meals subsidy at 25 cents per meal.

Up to 30 June 1975 grants totalling \$12 828 had been made to eligible organisations in South Australia.

# Handicapped Persons Assistance

Under the Handicapped Persons Assistance Act 1974, financial assistance provided by the Australian Government to eligible organisations conducting sheltered workshops and handicapped children's training centres has been extended. Grants may now be made available for activity therapy centres for handicapped persons. Subsidy is also available towards the cost of rehabilitation facilities (including holiday homes) which are ancillary to or provided together with an approved program of training, activity therapy, sheltered employment or residential accommodation. All capital and equipment subsidies are paid at a rate of \$4 for every \$1 raised from non-government

sources. A subsidy covering 50 per cent of actual salaries may be paid toward the cost of salaries of most staff. A higher rate of 100 per cent may be paid during an initial period in the case of some new enterprises. Since October 1970, a training fee of \$500 has been paid to sheltered workshop organisations for each handicapped person who remains in normal employment for twelve months following at least six months training by the organisation.

During the year ended 30 June 1975, grants totalling \$1745816 were approved under the Act.

# Handicapped Children's Benefit

A benefit is payable by the Australian Government for each physically or mentally handicapped child who is under sixteen years of age and resides in an approved home conducted by a charitable organisation. Since December 1974, the rate of benefit has been \$3.50 per day. In 1974-75, expenditure by the Australian Government, on handicapped children's benefits in South Australia was \$128 501. At 30 June 1975, 176 eligible handicapped children were accommodated in eight approved homes in South Australia.

## **Reciprocal Agreements**

New Zealand. An agreement exists between the Governments of Australia and New Zealand for reciprocity in social services. The arrangements cover age and invalid pensions, widows pensions, child endowment, and unemployment and sickness benefits, and apply to both permanent and temporary changes of residence. Residence in one country may be treated as residence in the other country in relation to entitlement to benefits in which a residential qualification applies. Persons from one country taking up permanent residence in the other country become eligible for any of the specified benefits of the new country under the same conditions (with one or two exceptions) as apply to citizens of that country. Persons in receipt of any of the specified benefits in one country may continue to receive those benefits while temporarily absent in the other country.

Britain. A reciprocal agreement on social services exists between Britain and Australia. Under the current agreement residence in one country may be treated as residence in the other country as the basis for entitlement to benefits in which a residential qualification applies. Australians going to Britain for permanent residence are treated in Britain as if they had been insured under the National Insurance Scheme while in Australia, so that they can qualify for various National Insurance benefits. There is also provision for the safeguard of social service rights for persons going from one country to the other for temporary residence.

# **Deserted Wives Assistance**

The State Grants (Deserted Wives) Act 1968 provides for assistance to be given by the Australian Government to the States in respect of aid for needy mothers with children, where there is no breadwinner and the mothers are not eligible for benefits under the Social Services Act. Broadly these include deserted wives during the first six months of desertion, wives during the first six months of the husband's imprisonment, deserted de facto wives, de facto wives of prisoners, other separated wives and unmarried mothers.

# **Telephone Rental Concessions**

The Department of Social Security with the Australian Telecommunications Commission provides telephone rental concessions to qualified pensioners in the form of a one-third reduction in annual rental charges.

# Telephone Interpreter Service

A Telephone Interpreter Service is operating through the Department of Social Security as an adjunct to migrant welfare services. It acts as a multi-lingual information service both to migrants, especially those with queries regarding government services and to professional people experiencing language problems with a patient or client.

## NATIONAL HEALTH SERVICES

# Expenditure

The following table shows Australian Government expenditure in South Australia from the National Welfare Fund on the various aspects of the national health services. The amounts shown are the direct costs of these benefits and services and do not include the cost of administering the services.

# National Health Services Expenditure, South Australia

Type of Benefit	Year First Paid	1971-72	1972-73	1973-74	1974-75
			\$'000		
Hospital and nursing home benefits (a) (b)	1946 1953 1951 1973 1948	15 340 15 387 2 968 — 10 098	18 103 17 695 3 243 101 10 667	21 994 17 969 3 826 632 13 049	31 126 20 370 5 087 770 16 700
fits (d)	1951 1947 1951	4 749 763 1 060 222	5 377 827 990 251	6 294 939 700 404	7 400 1 045  444
Total		50 587	57 254	65 807	82 942

<sup>(</sup>a) Includes Northern Territory for nursing home benefits and payments.

#### Hospital Benefits

The Medibank Hospitals Agreement between the Australian and South Australian Governments came into operation on 1 July 1975. From this date all persons in South Australia became eligible to receive, free of charge and without a means test, standard ward hospital accommodation and treatment

<sup>(</sup>b) Includes benefits and payments for Northern Territory residents insured with South Australian hospital and medical organisations. There are no organisations registered in the Northern Territory.

<sup>(</sup>c) Commenced March 1973.

<sup>(</sup>d) Includes Northern Territory.

in recognised (i.e. public) hospitals throughout the State. Persons who choose to be treated in private hospitals or as private in-patients of recognised hospitals may continue to insure with a registered benefit organisation.

From 1 July 1975 Australian Government payments to private hospitals have been \$18 a day for each bed occupied by an insured patient (\$16 a day direct to the hospital and \$2 a day through a benefit organisation) and \$16.80 a day for each bed occupied by an uninsured patient.

The following table gives details of Australian Government hospital benefit payments from 1971-72 to 1974-75.

# Hospital Benefits, South Australia

Type of Benefit	1971-72	1972-73	1973-74	1974-75
Hospitals:		AMOUNT P	AID (\$'000)	
Insured patients (a)	2 634	2 747	2 683	2 800
Uninsured patients	48	40	43	39
Special Account Advance and Deficit payments (a) (b) Subsidised Health Benefits Plan	3 744	4 038	5 949	9 248
payments (a)	950	1 321	1 550	2 222
Patients treated without charge	23	19	12	15
Pensioner patients	1 885	1 896	1 912	1 879
Nursing home patients (c)	6 055	8 027	9 778	<b>1</b> 4 699
Other nursing home payments $(a)$ $(d)$	_	14	68	224
Total	15 340	18 103	21 994	31 126

- (a) Includes benefits and payments for Northern Territory residents insured with South Australian organisations. There are no organisations registered in the Northern Territory.
- (b) Covers amounts paid for special account deficits (these being reimbursements to registered hospital benefit organisations for losses incurred on chronic or pre-existing ailments and long-term illness and advances in respect of these deficits).
- (c) Includes Northern Territory.
- (d) Covers Subsidised Health Benefits Plan fund benefit reimbursements and Special Account Advance and Deficit payments payable from 1 January 1973.

Before the introduction of the Medibank Hospitals Agreement the Australian Government paid hospital benefits to patients in approved hospitals under the following arrangements:

- (a) patients insured with a registered benefit organisation and in an approved hospital received a benefit (\$2 a day) paid through the organisation. Details of registered organisations are given on pages 313-14.
- (b) uninsured patients were entitled to a benefit (80c a day) which was deducted from the patient's account and paid by the Australian Government to the hospital;

- (c) pensioners enrolled with the Pensioner Medical Service and their dependants in standard wards of public hospitals were entitled to a benefit of \$5 a day which was paid to the hospital;
- (d) a benefit of \$2 a day was payable direct to approved hospitals for patients treated without charge;
- (e) special financial assistance for hospital benefits insurance was provided through the Subsidised Health Benefits Plan to low income families, to people receiving unemployment, sickness or special benefits and to migrant settlers for hospital expenses incurred during the first two months in Australia.

# **Nursing Home Benefits**

Australian Government nursing home benefits are paid direct to nursing homes on behalf of nursing home patients, the amount of benefit paid in respect of individual patients being deducted from the nursing home account payable by the patient.

There are three forms of nursing home benefit payable by the Australian Government, as follows:

- (a) Ordinary Care Nuring Home Benefit is payable at the rate of \$3.50 a day in respect of all patients accommodated in approved nursing homes.
- (b) A Supplementary Benefit of \$3 a day, in addition to the basic benefit, is payable in respect of patients who need and receive intensive nursing home care.
- (c) An additional benefit of \$7.80 per day is payable by either the Australian Government, in respect of pensioner patients who qualify under the means test for pensioner fringe benefits, or by hospital benefit organisations, in respect of other patients who insure with such organisations.

The Australian Government meets the operating deficits of certain religious and charitable nursing homes which enter into an agreement with the Government for this purpose. Nursing home benefits are not payable in respect of patients accommodated in such homes.

# **Domiciliary Nursing Care**

Domiciliary Nursing Care benefit of \$2 a day was introduced in March 1973. The benefit was designed to help meet the cost of home nursing and other professional care for aged people who are chronically ill but being cared for in the home environment. The benefit can be paid to any person who provides continuous care for a patient in a private home which is the residence of the person and the patient,

Patients must be sixty-five years of age or more, have a certificate from their doctor stating that they have a continuing need for nursing care by a registered nurse and they must be receiving this care by a registered nurse on a regular basis involving at least two visits each week. In remote localities, where nursing services are not readily available, a lesser amount of professional nursing care may be acceptable.

# **Medical Benefits**

Following the introduction of Medibank under the Health Insurance Act 1973-1975 from 1 July 1975, all persons in Australia became eligible for medical benefits amounting to at least eighty-five per cent of the schedule fee for medical treatment. Schedule fees are determined periodically by independent medical fees inquiries and the maximum difference between the schedule fee and the medical benefit paid by Medibank is \$5. Private benefit organisations offer insurance to cover this 'gap' between the benefit paid and the schedule fee.

Before 1 July 1975, the Australian Government paid medical benefits in respect of medical expenses incurred by persons who were members of registered medical benefit organisations or by the dependants of such members. The benefits were normally paid through the organisations to the member upon receipt of a medical practitioner's account. The fund benefit and the Australian Government benefit were paid in accordance with the rates prescribed under the National Health Act 1953-1974. Benefits were not payable where a patient received a payment by way of compensation or damages.

Special financial assistance for medical benefits insurance was provided through the Subsidised Health Benefits Plan to low income families, to people receiving unemployment, sickness or special benefits, and to migrant settlers for medical expenses incurred during the first two months in Australia. Expenditure for 1974-75 was \$612 000. Australian Government expenditure on medical benefits in South Australia in 1974-75 was \$20 370 000. Further details of medical benefits organisations are given on pages 313-14.

## Special Account

Contributors who would otherwise have been ineligible for medical and hospital fund benefits because of limitations imposed by registered private health insurance organisation rules relating to pre-existing ailments and maximum benefits in the case of medical benefits, and pre-existing ailments, chronic illnesses and hospitalisation in excess of the maximum periods for which benefits were payable in the case of hospital benefits, could, under the Special Account arrangements continue to receive the same benefits as other contributors. Benefits so paid, plus management expenses, were charged to the Account and contributions credited to it. The Australian Government reimbursed the deficit balances of the Special Accounts.

Contributors who had been transferred to a registered hospital insurance organisation Special Account for one of the above reasons could receive nursing home fund benefits under the Special Account arrangements. However, a claim for nursing home fund benefits would not entitle a registered hospital benefits organisation to transfer a contributor to the Special Account.

The deficit balances reimbursed in 1974-75 were \$9 248 000 in the case of hospital payments, \$219 000 in the case of nursing home payments and \$190 000 in the case of medical payments.

After 1 July 1975, Special Account arrangements for hospital benefits will help contributors who wish to have a higher level of hospital insurance than the standard ward cover provided by Medibank.

# Pharmaceutical Benefits

Under the Pharmaceutical Benefits Scheme certain medicines, when prescribed by a doctor, are made available to the general public upon the payment of \$1.50. Persons holding a Sudsidised Health Benefit certificate are required to pay 75 cents and pensioners are supplied free of cost. The drugs and medicinal preparations available as pharmaceutical benefits are determined on the advice of the Pharmaceutical Benefits Advisory Committee which also recommends the maximum quantities that can be prescribed. Pharmaceutical benefits are normally obtained through registered pharmacists but most public hospitals may also supply pharmaceutical benefits, as may doctors and certain recognised organisations in isolated areas.

# Pharmaceutical Benefits, South Australia (a)

	Number of	Cost	of Benefit Prescr	iptions	Additional
Year			Patients Contributions	Net Cost Australian Government	Costs to Australian Government (b)
	'000		\$'00	00	
1970-71 1971-72 1972-73 1973-74 1974-75	4 527 4 345 4 378 5 254 5 992	10 338 11 080 11 977 14 572 17 302	2 255 3 164 4 328 5 207 5 941	8 083 7 916 7 649 9 365 11 361	2 182 2 183 3 018 3 684 4 630

<sup>(</sup>a) Excludes pensioner benefits. Includes Northern Territory. (b) Payments to hospitals and miscellaneous services.

# Pensioner Medical Service

The Pensioner Medical Service was designed to provide a general practitioner service free of charge to eligible pensioners and their dependants. Persons receiving an age, invalid, widows or service pension, or a sheltered employment allowance, who met the requirements of a means test, and persons receiving a tuberculosis allowance were eligible pensioners. The service did not extend to specialist treatment, general anaesthetics, pathology services, X-rays, operations or the treatment of fractures, which were generally available to eligible pensioners through the public hospital system.

Doctors participating in the service were remunerated by the Australian Government on a fee-for-service basis. During 1974-75 fees for pensioner medical services were \$3.75 for surgery consultations and \$5.70 for domiciliary visits.

The Pensioner Medical Service arrangements with doctors ceased to operate on 30 June 1975. As from 1 July 1975 eligible pensioners became entitled to medical benefits for all schedule services under the *Health Insurance Act* 1973-1975 on the same basis as the remainder of the community. Special provision is made in the Act for arrangements to be made with doctors to render services to eligible pensioners without direct charge.

Pensioner Medical Service pensioners are still entitled, under the Pharmaceutical Benefits Scheme, to receive a wide range of medicines free of cost.

In addition to the normal nursing home benefits, the Australian Government pays an additional nursing home benefit in respect of pensioners enrolled in the Pensioner Medical Service which enables most pensioners to retain a small amount from their pension and supplementary allowances to spend on their personal needs.

# Pensioner Pharmaceutical and Medical Benefits, South Australia (a)

Yea	r	Number of Pensioners and	Number of Australian Governm  f Pharmaceutical Payments for Servic			
1 ca	.1	Dependants (b)		Pharmaceutical	Medical (c)	Total
		'0	00		\$'000	
1970-71 1971-72 1972-73 1973-74 1974-75		120 124 135 143 146	2 127 2 188 2 384 2 629 2 868	4 315 4 749 5 377 6 294 7 400	2 056 2 979 3 257 3 845 5 109	6 371 7 728 8 634 10 139 12 509

- (a) Includes Northern Territory.
- (b) Enrolled at end of year.
- (c) Includes payments for mileage vouchers.

#### Health Insurance Cover

In August 1972, a sample survey based on the quarterly population survey was conducted throughout Australia to obtain information about the extent to which persons aged fifteen years and over were covered by hospital or medical expenditure assistance schemes.

The survey indicated that in August 1972, 86.5 per cent of the non-institutional population aged fifteen years and over were covered by a hospital and/or a medical expenditure assistance scheme. Of all the States the highest coverage was recorded for South Australia (94.1 per cent).

For the purpose of the survey, hospital and/or medical expenditure assistance schemes comprised: (i) contributory hospital and/or medical benefits funds; (ii) non-contributory schemes, including the Pensioner Medical Service, free cover of persons on unemployment or sickness benefits, and free cover of low income families.

A hospital and/or medical benefits fund is defined as 'a non-profit organisation, registered under the *National Health Act* 1953-1974, providing benefits towards the cost of meeting hospital and/or medical expenses'. At the time of the survey there were ninety-four such organisations in Australia; seventy-three provided coverage for both hospital and medical expenses; sixteen provided coverage for hospital expenses only and five provided coverage for medical expenses only. About one-quarter of the funds restricted eligibility for membership by reference to employment, a particular profession, professional association or union.

The following table classifies this coverage according to the type of person and compares South Australia with the total rates for Australia.

Non-institutional Civilian Population Aged 15 Years and Over: Coverage of Hospital and Medical Expenditure Assistance Schemes, August 1972

Category	Expenditure Assis	stance Schemes
	outh Australia	Australia (a)
Married men	95.4	89·4
Other males $(b) \ldots \ldots \ldots$	86.4	73.7
All males	92.6	84.3
Married women	95.9	89.5
Other females $(b) \ldots \ldots \ldots$	94.7	87 · 1
All females	95.5	88.7
Persons	94.1	86.5

<sup>(</sup>a) Includes the Northern Territory and the Australian Capital Territory.

There was a tendency for the proportion of persons covered by these schemes to increase in successively higher age groups, from  $79 \cdot 1$  per cent, for those aged fifteen to nineteen years, to  $95 \cdot 3$  per cent, for those aged seventy years and over. Coverage rates varied according to birthplace;  $87 \cdot 6$  per cent of persons aged fifteen years and over who were born in Australia were covered, compared with  $83 \cdot 3$  per cent for those born outside Australia. There was a wide variation between persons born in different countries from  $92 \cdot 5$  per cent for persons born in the Netherlands to  $62 \cdot 5$  per cent for persons born in Greece. Coverage rates also varied according to occupation; the highest rate being recorded for professional, technical and related workers  $(92 \cdot 4$  per cent) and the lowest for labourers  $(68 \cdot 7$  per cent).

Further information may be obtained from the bulletin, *Persons Covered by Hospital and Medical Expenditure Assistance Schemes*, August 1972 (reference 17.10) published by the Australian Statistician.

# Anti-Tuberculosis Campaign

Since 1948 the Australian Government has paid for all additional capital expenditure on tuberculosis clinics and hospitals and for any increase in the cost of diagnosis, treatment, and control of tuberculosis.

The Australian Government also pays allowances to people suffering from tuberculosis to encourage them to give up work and undergo treatment. The allowances, paid to persons under 70 years of age, are subject to a means test

<sup>(</sup>b) Never married, widowed and divorced.

on income. At 31 December 1975 the maximum income permitted before allowances were affected was \$20 per week for a single person and \$17.25 for each married person.

Australian Government Expenditure	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Allowances paid to sufferers Maintenance expenditure (a) Capital expenditure	52 582 108	33 757 155	67 811 243	48 988 395	38 1 114 31
Total	742	945	1 121	1 430	1 183

<sup>(</sup>a) Includes administrative expenses not paid from National Welfare Fund.

At 31 December 1975, the allowance payable to a married person and his or her spouse was \$34 a week each. In addition, an amount of \$7.50 a week was paid for each dependent child who was under sixteen years of age or undergoing full-time education. This amount was apportioned evenly between the sufferer and the spouse. A single person without dependants, if not hospitalised, received \$42 a week or, if receiving hospital treatment free of charge, \$38.75 a week. Widows or widowers with dependent children either under sixteen years of age or undergoing full-time education received \$42.75 a week, plus \$7.50 a week for each dependent child plus a mothers or guardians allowance of \$4 a week. An additional mothers or guardians allowance of \$2 a week was also paid where there was a dependent child under six years of age or a dependent invalid child requiring full-time care.

## REPATRIATION BENEFITS

## **Disability Pensions**

Disability pensions are paid by way of compensation to ex-servicemen and women who suffer incapacity because of war service, to their eligible dependants, and to the dependants of those whose death is attributable to war service. There are four main classes of disability pensions.

The special (TPI) rate (\$74.10 a week from 6 November 1975) is payable to those who are deemed totally and permanently incapacitated.

The intermediate rate (\$51.05 a week from 6 November 1975) is payable to an ex-serviceman who, because of the severity of his war-caused incapacity, can work only part-time or intermittently and in consequence is unable to earn a living wage.

The general rate is payable to those who suffered war-caused disabilities but still retained some earning capacity. The pension payable depends on the degree of incapacity, the maximum from 8 May 1975 being \$28 a week. Pensions are also payable for a wife and each child under sixteen years of age under both special and general pensions.

The widows rate is payable to widows of ex-servicemen who died as a result of war service, and to any children under sixteen years of age. An additional domestic allowance is payable to certain classes of widows. From 6 November 1975 the widows rate was \$38.75 a week and the domestic allowance \$12.

# Disability Pensions, South Australia (a)

	Pens	sions in Force a	t End of Year		
Year	Incapacitated Ex-Servicemen	Incapacitated	Dependants of Deceased Ex-Servicemen	Total	Expenditure
		Numb	er		\$'000
1970-71 1971-72 1972-73 1973-74 1974-75	20 125 19 844 19 423 19 092 18 682	27 075 25 612 25 345 24 413 23 545	5 193 5 126 5 048 4 986 4 866	52 393 50 582 49 816 48 491 47 093	15 722 17 270 18 405 20 962 26 583

<sup>(</sup>a) Excludes pensions payable under the Seaman's War Pensions and Allowance Act and various Cabinet decisions: 1974-75; forty-four pensions, expenditure \$58 000. Includes Northern Territory.

# Service Pensions

Service pensions are payable to ex-servicemen who served in a theatre of war and have reached the age of sixty years (fifty-five for women) or who are permanently unemployable or suffering from pulmonary tuberculosis. The service pension is equivalent in amount to the social services age and invalid pensions and is subject to the same means test. It also confers eligibility for a full range of medical and dental treatment. The dependants of service pensioners may continue to receive their appropriate allowance upon the death of the pensioner. All service pensioners aged seventy-five years and over have received the pension free of the means test from 27 September 1973.

# Service Pensions, South Australia (a)

\$7	Per					
Year	Ex-Servicemen	Dependants of Dependants of Pensioner Deceased Ex-Servicemen Pensioners		Total (b)	Expenditure (c)	
		Numb	\$'000			
1970-71 · · · · 1971-72 · · · · 1972-73 · · · · 1973-74 · · · · 1974-75 · · · ·	5 949 6 025 6 929 7 738 8 224	1 540 1 556 2 444 2 849 3 384	465 458 456 383 368	7 954 8 039 9 829 10 970 11 976	4 651 5 186 7 467 10 340 15 133	

<sup>(</sup>a) Includes Northern Territory.

<sup>(</sup>b) Excludes Act of Grace pensions—seventeen in 1974-75.

<sup>(</sup>c) Includes payments for Act of Grace pensions.

## Medical Services

The Department of Repatriation provides hospital treatment, general practitioner services, specialist facilities, pharmaceutical benefits, dental treatment, and nursing home benefits for eligible persons. A comprehensive rehabilitation and social worker service is also available. Medical treatment is provided for all service-related disabilities, pulmonary tuberculosis, and all forms of malignant cancers. Treatment for all non-service-related disabilities is made available to veterans receiving a disability pension at or above the 100 per cent general rate, veterans of the Boer and 1914-18 Wars; veterans who are ex-prisoners of war, veterans in receipt of service pensions (subject to means being within the limits governing the provision of free medical treatment and other fringe benefits), widows, and certain dependants of deceased male veterans whose deaths have been accepted as related to service.

Repatriation: Medical Services, South Australia (a)

Year -		In-Patients: Total Treated			Out-Patients: Number of Visits		Pharma- ceutical
	Tear	Daw Park	Birralee	Other Hospitals	Daw Park	Visits to or by Medical Officer	Benefits
1970-71 1971-72 1972-73 1973-74 1974-75		5 919 5 269 5 251 5 839 6 107	138 162 119 ——————————————————————————————————	Number 900 847 840 882 935	61 377 69 541 73 650 74 999 76 849	194 107 198 007 209 872 180 257 189 087	\$ 1 322 498 1 422 955 1 514 849 1 571 946 1 699 990

<sup>(</sup>a) Includes Northern Territory.

In-patient and out-patient treatment is provided at the Repatriation General Hospital, Daw Park. Facilities at the Out-patient Department include radiological, pathological, physiotherapy, and chiropody services in addition to medical specialist examinations. The Department of Repatriation also maintains an auxiliary hospital, 'Birralee' at Belair for patients who require nursing home care.

The Repatriation Artificial Limb and Appliance Centre, as well as attending to repatriation needs, provides appliances and services for other government departments and provides artificial limbs free of charge to all disabled members of the community.

## **Education and Training**

Assistance in education and training is provided, through the Department of Repatriation, for children of ex-servicemen whose death, blindness or total and permanent incapacity is accepted as service-related. The Soldiers' Children Education Board guides and supervises the progress of children receiving such assistance. In certain circumstances vocational training is also provided for disabled ex-servicemen and widows of ex-servicemen.

## Other Services

Other assistance, through the Department of Repatriation, includes gift cars for certain disabled ex-servicemen, aids for blinded ex-servicemen and business re-establishment loans. Funeral grants of up to \$100 are paid on the death of certain ex-servicemen and dependants.

### ABORIGINAL ADVANCEMENT

By agreement with the South Australian Government on 1 December 1973 the Australian Government assumed responsibility in relation to Aboriginal affairs policy, planning, financial administration, information and co-ordination. These functions are administered in South Australia by officers of the Department of Aboriginal Affairs in Adelaide and Port Augusta. The transfer of responsibilities, however, did not include the Aboriginal Reserves in South Australia which were to be managed and controlled by the Minister of Community Welfare.

The policy of the Australian Government is that, wherever possible, Aboriginal people should avail themselves of the normal facilities provided for the total community, for example, welfare, health and education, and the State or Australian Government departments responsible for these functions will continue to provide such services. Where special additional programs are needed for Aboriginal people the Australian Government will provide the finance to enable these to be carried out through the appropriate Government or voluntary agency, with the co-ordination of arrangements being handled by the Regional Director of the Department of Aboriginal Affairs. Funds are also made available direct to Aboriginal organisations and communities within the State for programs designed to develop Aboriginal self-sufficiency and achievement.

The following table shows funding by the Department of Aboriginal Affairs on various aspects of Aboriginal advancement.

### Department of Aboriginal Affairs: Funding, South Australia, 1974-75

Particulars	Amount
Advancement program funds to State Government Departments:	\$
Department for Community Welfare Education Department Housing Trust. Police Department Public Health Department	925 700 999 000 3 382 000 256 000 1 037 000
Total	6 599 700
Direct funds to Aboriginal organisations and communities:	
Housing Hostels Education Welfare organisations Community councils Community amenities Purchase and development of properties Special works projects Business enterprises	1 550 150 683 200 353 178 177 649 1 103 360 789 600 371 900 395 029 230 000
Total	5 654 066

Specific needs in education were met with the establishment in 1973, of both the Aboriginal Community College, as part of Torrens College of Advanced Education, and the Aboriginal Task Force at the South Australian Institute of Technology. The College provides remedial work-orientated training and self-development courses for Aborigines who have had difficulty in maintaining work continuity. The Task Force is a community development training program which provides trained staff for Government departments handling aspects of Aboriginal Affairs and for Aboriginal communities themselves.

The Aboriginal Housing Board is a predominantly Aboriginal body which makes policy and gives direction to the South Australian Housing Trust in relation to houses for Aboriginal tenants. The Trust acts as agent for the Board in purchasing, maintenance and rent collection.

### STATE WELFARE SERVICES

#### EXPENDITURE

The following table shows receipts and outlay by the State Government from Consolidated Revenue Account on various aspects of social security and welfare. For further details of the classifications in the table see Part 11.3 State Government Finance.

Receipts and Outlay on Social Security and Welfare, South Australia, 1974-75(a)

			Receipts (b)				
Purpose	Purchases of Goods and Services	Current Grants to Private Non-profit Organisa- tions	Less Charges for Goods and Services Supplied	Cash Benefits to Persons	Total (Incl. other)	Total (c)	
			\$'0	00			
General administration, regulation and research	5 476	11	75	189	5 762	114	
Care of and assistance to: Aged persons	1 360	186	707	3 717	(d) 7 266	378	
Incapacitated and handicapped persons	_	1 066	_	24 459	1 094 459		
Ex-servicemen		2	_	226	228	1 0.00	
Widowed and deserted spouses Families and children (e)  Other social security and welfare		141	36	2 460 592	2 460 2 673	1 062	
services: Services to Aborigines n.e.c. (f) Other	1 131	303	136 96	1 8	1 116 227	3 360	
Total	9 901	1 709	1 050	7 676	21 285	1 917	

<sup>(</sup>a) Consolidated Revenue Account only.

<sup>(</sup>b) Charges for goods and services supplied have been excluded from receipts and deducted in calculating outlay.

<sup>(</sup>c) Mainly grants from Australian Government.

<sup>(</sup>d) Includes \$2 045 000 transferred to local government authorities in respect of pensioner rate remissions.

<sup>(</sup>e) Excludes reformative institutions.

<sup>(</sup>f) Includes only programs designed to meet specific needs of persons of Aboriginal descent.

### COMMUNITY WELFARE

The first official activity for the social welfare of children and adults was taken soon after colonisation. The early State immigration authorities cared for new arrivals, and sometimes immigrants were accommodated temporarily in tents on the parklands. A more permanent solution of the problems of the destitute came with the first Destitute Persons Relief Act in 1842. In 1849 a Destitute Board was formally appointed and assumed reponsibility for the welfare of both children and adults. In 1886 a State Children's Council was formed to deal with children, while the Destitute Board continued with its other work. The Children's Welfare and Public Relief Board was created by the Maintenance Act, 1926 to do the work of both these earlier authorities. The Chairman of the Board was the permanent head of the Children's Welfare and Public Relief Department.

In 1965 a new portfolio of Minister of Social Welfare was created. Subsequently the Children's Welfare and Public Relief Board was abolished under the Social Welfare Act, 1926-1965, and its powers and functions vested in the Minister of Social Welfare, a body corporate under the Act. The Department then became the Department of Social Welfare and the Social Welfare Advisory Council was set up to advise the Minister on any question regarding social welfare. On 1 July 1970 this Department was amalgamated with the Department of Aboriginal Affairs to form the Department of Social Welfare and Aboriginal Affairs.

The Social Welfare Act, 1926-1971, the Aboriginal Affairs Act, 1962-1968 and the Children's Protection Act, 1936-1969 were replaced by the Community Welfare Act, 1972 which became operative on 1 July 1972. Under this Act the Department became the Department for Community Welfare with the objectives of promoting the general well-being of the community, encouraging the welfare of the family as the basis of community welfare, promoting co-ordination of services and collaboration amongst various agencies and promoting research, education and training in community welfare.

This Act provides for the establishment of community welfare centres at selected locations throughout the State and the full range of the Department's services is available from these centres. District offices have been established at Adelaide, Amata, Berri, Brighton, Campbelltown, Christies Beach, Coober Pedy, Elizabeth, Enfield, Indulkana, Maitland, Mansfield Park, Mitcham, Modbury, Mount Gambier, Murray Bridge, Norwood, Nuriootpa, Port Adelaide, Port Augusta, Port Lincoln, Port Pirie, Salisbury, Woodville and Whyalla, and branch offices at Glenelg, Marion, Thebarton, Leigh Creek, Stirling, Ceduna, Oodnadatta, Naracoorte and Millicent.

The decentralisation program has led to a new sense of involvement in the community and its many welfare needs. There is greater flexibility and opportunity to support local efforts to provide new services for youth, the aged, single parents and others in need.

Community Councils for Social Development, formerly Community Welfare Consultative Councils, were set up throughout the State following guidelines laid down in the Community Welfare Act. They involve local people in providing better welfare services for their own communities. Departmental support is given to the Councils through the Community Development Branch.

The Department has developed and extended its ties with the Australian Government and other State Government departments and with local government and voluntary bodies. There has been a Community Welfare Grants Advisory Committee established in 1972 to recommend grants to assist voluntary community welfare organisations with both capital and operating costs.

A Social Planning and Research Branch has been established and a special Youth Services Unit gives advice and guidance to organisations seeking to develop youth programs and facilities.

### Care and Supervision of Children

Under the Juvenile Courts Act, 1971-1974 the emphasis is on the welfare and rehabilitation of young offenders, together with the adequate protection of the community.

Any child up to the age of eighteen may be dealt with as neglected or uncontrolled and those up to the school leaving age may be charged with truancy. Offenders dealt with are between the ages of ten and eighteen years. The Juvenile Court may place the child under the care and control of the Minister of Community Welfare or on a bond. He may be placed under the supervision of a Departmental officer or may be obliged to attend at a youth project centre as a condition of the bond. Either of these court orders results in Departmental help for the child for the period set by the Court.

Some children under the care and control of the Minister are placed in Departmental homes or centres for care, treatment and training. Many are placed with their parents or with foster parents, or in other substitute care under the supervision of a community welfare worker.

The Department for Community Welfare has established a special treatment services branch with the following functions:

- (1) the development of community based treatment projects including the Youth Project Centre at Magill and the Norwood Project Centre;
- (2) the oversight and development of Juvenile Aid Panels;
- (3) assistance for juveniles appearing before the Courts;
- (4) special residential care for:
  - (a) offenders who cannot be satisfactorily maintained by the community,
  - (b) offenders on remand from Court and sometimes needing assessment,
  - (c) children who have been neglected or whose foster placement has broken down.

The Youth Project Centre, Magill, provides intensive non-residential treatment facilities for young offenders. The Norwood Project Centre helps children who are referred with learning and behavioural difficulties.

Juvenile Aid Panels provide a non-judicial setting to deal with certain children under sixteen years, alleged to have committed an offence, or be uncontrolled or habitual truants. A community welfare worker from the Department for Com-

munity Welfare and either a senior police officer (in most cases) or a justice of the peace constitute a panel. Panels may warn or counsel children or parents. They may request the child or his parents to co-operate in a rehabilitative program for the child. Panels have power to refer a child to a Juvenile Court and the child or his parents may ask for such a referral.

### Juvenile Court Services

Officers from the Department for Community Welfare appear in all major Juvenile Courts to present reports and help Courts to reach a decision in the best interests of the child.

Juvenile Courts officers also represent the Department in the prosecution of neglect and uncontrolled charges when necessary. They protect the interests of children under the guardianship of the Minister when these children appear in court.

#### Residential Care

At 30 June 1975 the Department was operating thirty-seven residential care homes and centres. The large number of family homes, cottage homes, hostels and training centres allows a wide range of choice in selecting the environment most appropriate to the needs of each individual.

Details of the number of children committed to the care and control of the Minister of Community Welfare are given in the following table. Of the 442 children committed during 1974-75, 155 were girls, of whom 50 were neglected or uncontrolled. Of 2 234 children under care and control at 30 June 1975, there were 1 409 boys and 825 girls.

### Children under Care and Control. South Australia (a)

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
Number of children newly committed during the year:					
Offenders	386	484	252	182	125
Neglected	164	144	160	143	75
Uncontrolled	42	32	24	26	15
Truancy	14	12	7	16	19
Temporary care and control			221	220	176
In Default of Fine	_				32
Total	606	672	664	587	442
Number of State children at 30 June: Children in departmental					
institutions	539	455	443	377	320
Children not in institutions	2 667	2 656	2 425	2 168	1 914
Total	3 206	3 111	2 868	2 545	2 234

<sup>(</sup>a) Excludes children on remand, not committed.

The homes and centres under the control of the Department include McNally Training Centre for older youths, who have been committed for residential training or assessment by a Juvenile Court following an offence, and Brookway Park, which provides residential training or assessment for boys between ten and fifteen years, most of whom have been committed by a Juvenile Court following an offence.

Vaughan House provides remand and assessment facilities for girls, generally from twelve to eighteen years. Windana which provided remand, assessment and safekeeping facilities for boys closed on 30 June 1975.

Lochiel Park is a training centre for boys, generally between the ages of fourteen and eighteen years, who are mentally retarded and under care and control of the Minister. In addition, cottage and family homes provide a family-like atmosphere for small groups of boys and girls.

In addition, there were 819 children placed on bonds requiring supervision by Departmental officers during 1974-75 and the total number of such children at 30 June 1975 was 1 012 (888 boys and 124 girls).

The importance of keeping a child in his own home whenever possible cannot be over-emphasised and children are placed out of Departmental homes and centres as soon as possible. Review boards consider the social background of each child under care and control and make recommendations regarding action to be taken for the child's benefit and welfare.

When a child is returned to his own home from an alternative placement, support is continued to the whole family through counselling, motivation of self-help programs, and through the full utilisation of appropriate resources throughout the Department and the community. The same services of a community welfare worker are available to all children under care and control or on bonds with supervision as well as to other families in the community seeking help.

Other responsibilities of the Department's welfare workers include the investigation of allegations that children are neglected, ill-treated or uncontrolled, and the counselling of youths and children voluntarily referred to Departmental officers. Departmental welfare workers are also appointed as attendance officers under the Education Act to assist in the prevention of school truancy. Medical and other specialists including psychologists are employed within the Department.

### Licensing of Foster Parents and Children's Homes

Under the Community Welfare Act, 1972-1975 every foster parent caring for a child under the age of fifteen years must be approved by the Director-General of Community Welfare, who is responsible for each child's welfare. Departmental officers visit such homes regularly.

Consultant and licensing services are provided in the areas of Child Care, Family Day Care and Non-Statutory Children's Homes. Family Day Care Co-ordinators are working in seven districts. At Mansfield Park and Ferryden Park there are joint Department for Community Welfare/Education Department projects combining Family Day Care with pre-school and child-parent programs, while at Campbelltown, Brompton, Nangwarry and Thebarton both Departments are working in co-operation with local groups to establish Child Care, Resource Centre and Pre-school facilities.

### Adoptions

South Australia has had an Adoption of Children Act since 1925, the current legislation being the Adoption of Children Act, 1966-1975. Under this Act the interests of the children are considered paramount. The right to place children for adoption is restricted to the Director-General of Community Welfare or to private adoption agencies which the Director-General has approved. The adoptive parents, who must be approved by the Director-General, become the legal parents after the adoption order is made by an Adoption Court, (usually about six months after placement).

Adoptions made in other Australian States are recognised in South Australia; similarly South Australian adoptions are recognised in the other States. A more detailed account of the South Australian legislation was included on pages 221-4 of the South Australian Year Book 1968.

There are two types of adoptions, namely, adoptions by placement and other adoptions. Adoptions by placement include those adoptions where the child is normally placed with the adoptive parents either at, or within 12 months of birth. Other adoptions mainly comprise those cases where children of a former marriage are adopted into the present marriage. The following statistics relate to those adoptions for which an order was made in the stated period, and not to the number of placements or other adoptions occurring in that period.

Of the total of 551 adoptions (295 males and 256 females) in 1974-75 (7 less than in 1973-74), 323 were placed and 228 were other adoptions. The average waiting time for a child to be placed varies from year to year, depending on the number of applicants and the number of children surrendered.

N	umber	of	Adoptions,	South	Australia
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Age of Child (a)	1970-71	1971-72	1972-73	1973-74	1974-75
Under one year. One year and under two Two years and under six Six years and under thirteen Thirteen years and under sixteen Sixteen years and over.	44 69 100 15	510 44 89 88 19 26	426 46 75 71 17	352 37 68 59 10 32	271 47 112 92 11 18
Total		776	649	558	551

<sup>(</sup>a) At date of adoption order.

For adoption orders relating to children placed in 1974-75, the average age of the natural mother at the date of birth of the children was  $19 \cdot 6$  years, while for the adoptive parents the respective average ages at the date of adoption order were, mothers  $31 \cdot 1$  and fathers  $33 \cdot 5$ .

The following table shows details of the age of the adoptive parents for children placed in 1974-75.

Age of Adoptive	Parents at	Date o	f Adoption	Order,	Children	Placed
	South	ı Austra	lia, 1974-75			

Age of		Age of Father						
Mother (Children Placed)	Under 21	21-24	25-28	29-32	33-36	37-40	Over 40	– Total
Under 21					<del></del>			
21-24		5	6	2				13
25-28		1	29	58	8	3	1	100
29-32			9	48	49	9	5	120
33-36				13	23	22	5	63
37-40		-			2	5	5	12
Over 40			_	1		_	13	14
Total	_	6	44	122	82	39	29	(a) 323

<sup>(</sup>a) Includes one order on which ages of parents were not stated.

### Legal Services

Prosecutions for neglected, ill-treated and uncontrolled cases are carried out by officers of the Department for Community Welfare who may also appear in Court where State children are involved. The Department assists by providing reports on the social background of children whose cases are considered by the Courts.

The Department provides a free legal service to deserted wives and other persons with maintenance, matrimonial and domestic problems. Officers interview and advise wives and husbands and negotiate with other parties and solicitors for settlements.

When necessary the officers institute legal proceedings and appear in Court on behalf of those seeking assistance to obtain Orders for separation, custody of children, access and maintenance. The Department does not take action for divorce. Some 2 200 maintenance payments are collected and paid weekly to deserted wives by the Department. Assistance is given to unmarried mothers in affiliation cases.

### Financial Assistance

The Director-General for Community Welfare may, subject to any directions of the Minister, provide assistance to families or individuals in need. The assistance may be provided in the form of money or commodities or the provision of other services which will promote the welfare of the family or individual.

During 1974-75 financial assistance was issued to 14 109 applicants, representing 31 868 persons. The gross cost of assistance issued was \$4 113 357.

The Department provides residential care in a home at Magill for aged people in special need, most of whom are pensioners. The daily average occupancy of the Magill home was 172 during 1974-75.

### Rates Remission Scheme

From 3 July 1973, the South Australian Government introduced a remission of rates and taxes scheme for pensioners and others able to demonstrate exceptional circumstances of hardship. The scheme provides for a remission of up to 60 per cent of the cost of water and sewerage rates, land tax and council rates charged on dwellings, including flats and units owned and occupied by eligible applicants. Pensioners receive a direct remission from the rating authority on application. Applications from non-pensioners were processed by the Department, 726 claims being approved totalling \$16 142. The total cost of remissions by all authorities was met by the Department and totalled \$4 002 785 in the following categories:

	\$
Land Tax	242 559
Water, Sewerage	1 715 321
Local Government	2 044 905

### Aboriginal Reserves

There are five Aboriginal reserves in this State. These centres provide vocational training, health, education and housing facilities to give Aborigines the opportunity to adopt some modern modes of living within the security of their own communities, or they facilitate life in comparatively traditional ways for those Aboriginals who choose it. There are reserves at Amata, Coober Pedy, Davenport, Indulkana, Koonibba, and missions at Ernabella and Yalata.

From July 1974 the Point McLeay and Gerard Aboriginal Reserves were managed and controlled by the Aboriginal Lands Trust in line with the goal that the people should manage and control the Reserves themselves. By the beginning of 1976, lands at Point Pearce, Yalata, Coober Pedy, Koonibba, Nepabunna and Indulkana had been transferred to the Lands Trust. Some of these lands have already been leased back to Aboriginal community councils and leasing arrangements are in hand for those areas not yet under Aboriginal control.

### PRIVATE WELFARE SERVICES

There are numerous charitable and benevolent organisations working within South Australia. A large proportion of these derive revenue from regular donations, subscriptions and income from bequests; nearly all derive revenue from special functions. A number also receive Australian, State or local government grants. The Collections for Charitable Purposes Act, 1939-1947, requires the registration of charitable organisations before they may actively solicit funds.

Organisations which have a wide range of activities include the Australian Red Cross Society, Marriage Guidance Council, Service to Youth Council, the welfare bureaux and missions of the various churches, and organisations catering for ex-servicemen and their dependants. Most of these agencies maintain full-time staff and generally employ professional social workers. Other organisations cater for more specific needs, covering a wide range of physical and sociological disabilities. This includes the care of physically and mentally handicapped persons such as crippled children, the blind, deaf-mutes and alcoholics; also of specific groups such as aged persons, Aborigines and migrants. Many of these organisations depend largely or entirely on voluntary aid.

For details of the numerous bodies concerned with social welfare, reference should be made to the *Directory of Social Resources* published jointly by the South Australian Council of Social Services and the Department of Public Health. For those in need, the Citizens Advice Bureau advises on how to benefit from and how to use wisely the many services provided by the Australian and State Governments and the various voluntary organisations.

### REGISTERED MEDICAL AND HOSPITAL ORGANISATIONS

Since 1953 Australia has had a system of voluntary health insurance supervised and financially supported by the Australian Government through the payment of 'Commonwealth' benefits. Before the introduction of Medibank under the *Health Insurance Act* 1973-1975 medical benefits and full hospital benefits were payable to members of a registered benefits organisation. In most cases both medical and hospital benefits were provided by the one organisation. By paying regular contributions members became entitled to refunds covering the major part of medical and hospital expenses. The benefit was combined with the fund benefit in a single payment made by the registered organisation.

From 1 July 1975 all persons in South Australia became entitled to medical benefits at the same level as that previously paid by private benefit organisations and to free accommodation and treatment at recognised hospitals. Private benefit organisations, however, now offer insurance to cover the 'gap' between the medical benefit paid by Medibank and the schedule fee for medical treatment. 'Gap' insurance was not available under the previous insurance system. The organisations continue to offer insurance to those persons who wish to be treated in a private hospital or as private in-patients in a recognised hospital.

These organisations are operated on a non-profit basis and include a number of Friendly Societies.

Registered I	Hospital	Organisations,	South	Australia(a)
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Particulars	Unit	1970-71	1971-72	1972-73	1973-74	1974-75
Registered organisations (b)	. '000 . '000	10 433 1 069 14 576	9 433 1 076 21 284	9 444 1 112 (e) 25 027	9 453 1 135 29 192	9 448 1 126 44 080

<sup>(</sup>a) State of registration of organisations. No organisations are registered in the Northern Territory and insured persons in the Northern Territory are covered by organisations registered in the States. (b) At end of period. (c) As advised by the organisations. (d) Includes Subsidised Health Benefits Plan fund benefit reimbursements (\$2 085 000 for hospital payments and \$6 000 for nursing home payments in 1974-75). Also includes Ancilliary fund benefit. (e) Includes nursing home fund benefit from 1 January 1973.

The contributions (premiums) payable to hospital benefits organisations depend on the scale of fund benefits required. From 1 July 1970 all medical benefits organisations have paid medical benefits at the same rate. Contribution rates to medical and hospital organisations may vary slightly between funds, and single and family rates are available.

Details of registered medical organisations are given in the following table.

### Registered Medical Organisations, South Australia(a)

Particulars	Unit	1971-72	1972-73	1973-74	1974-75
Registered organisations (b)	No.	7	7	7	7
Membership $(b)$ $(c)$	'000	420	432	443	442
Estimated persons covered (b) (c) Cost of medical services:	'000	1 057	1 091	1 118	1 091
Met by fund benefit (d) Met by Australian Government	\$'000	9 374	10 294	11 628	17 889
benefit (e)	\$'000	13 509	15 607	15 845	17 652
Met by insured member	\$,000	5 027	5 141	5 709	6 435
Total	\$'000	27 910	31 042	33 182	41 976
Proportion (f) paid by:					
Fund benefit	Per cen	at 33.6	33.2	35.0	42.6
Australian Government benefit	Per cen	t 48·4	50-3	47.8	42.1
Insured member	Per cen	t 18.0	16.6	17.2	15.3
Fund benefits for ancillary services (g) Professional services per member:	\$'000	312	327	349	633
General practitioner	No.	7.15	6.97	6.74	7.05
Other	No.	4.52	4.61	4.54	5.28
Total	No.	11.67	11.59	11-28	12.32

<sup>(</sup>a) State of registration of organisations. No organisations are registered in the Northern Territory and insured persons in the Northern Territory are covered by organisations registered in the States. (b) At end of period. (c) As advised by the organisations. (d) Excludes ancillary fund benefit but includes Subsidised Health Benefits Plan fund benefit reimbursements (\$519 000 in 1974-75). (e) Excludes Special Account Advance and Deficit payments. (f) Based on proportions paid in relation to matched services, i.e., those which attract both Australian Government and Fund benefits. (g) Services for which Australian Government benefits are not provided.

### FRIENDLY SOCIETIES

Friendly Societies are mutual organisations paying medical, hospital and other benefits to members and dependants in time of need. These societies are required to register under the Friendly Societies Act, 1919-1975. The Act is administered by the Chief Secretary through the Public Actuary who approves the table of contributions, the level of benefits and generally sees that the societies' rules and practices are in accordance with the law. A number of Friendly Societies are registered to pay Australian Government medical and hospital benefits (see previous section), while others re-insure such benefits through a society created for this purpose.

Other benefits offered by the societies include sickness, funeral, pharmaceutical and physiotherapy benefits; endowment assurance is also available. The Friendly Societies Act requires that separate funds be maintained for each of these benefits and members may contribute for all or for only a selection of benefits. However, a person is considered to be a full benefit member only if he contributes for sick pay and funeral benefits regardless of contributions for other benefits.

### Friendly Societies, South Australia

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
Number of registered societies					
(a)	14	13	13	12	12
Number of members $(a)(b)$ Revenue $(c)$ :	50 488	50 077	50 664 \$'000	50 779	49 888
Contributions and levies Interests, dividends and	9 993	11 744	12 198	15 023	21 626
rent	1 110	1 243	1 311	1 496	2 000
Other	1 237	1 961	2 726	3 120	5 179
Total revenue	12 341	14 947	16 235	19 638	28 805
Expenditure (c):		***************************************			
Sick pay	181	173	173	158	156
Medical attendance and					
medicine	3 386	3 878	4 401	4 981	7 435
Sums payable at death	151	145	142	143	150
Hospital benefits	4 982	7 198	8 432	10 045	14 567
Administration	1 483	1 641	1 793	2 149	2 883
Other	550	690	613	571	644
Total expenditure	10 733	13 726	15 554	18 047	25 835
Total funds	20 962	22 184	22 865	24 456	27 426

<sup>(</sup>a) At 30 June. (b) Full benefit members; does not include those who contribute for medical and hospital benefits only. (c) Receipts and payments of Australian Government medical and hospital benefit subsidies excluded.

The level of benefits paid varies between societies, with sickness benefits generally on a declining scale as the period of illness lengthens. The Friendly Societies Act limits to \$4 000 any payment for endowment or funeral benefits and to \$21 any weekly payment to members for sickness or superannuation.

The Friendly Society Medical Association operates thirty pharmacies in the metropolitan area and one at Port Pirie where medicines are dispensed for Friendly Society members at concession prices.

The Friendly Societies Act also prescribes the nature of assets which societies may hold. Their most important investment is in property mortgages and in particular in housing loans to members. They may also invest in government securities.

### 6.7 MARRIAGE

Registration of marriage has been compulsory in South Australia since 1842 when Acts 'for regulating Marriages in the Province of South Australia' and 'for registering Births, Deaths and Marriages in the Province of South Australia' were passed. The present legislation relating to marriages is the Australian Marriage Act 1961-1973 which came into full operation on 1 September 1963 superseding, in South Australia, the Marriage Act, 1936-1957.

The Principal Registrar of Births, Deaths and Marriages in South Australia carries out the statutory duties under the Act and has supervision over ministers of religion (as regards their duties under the Marriage Act), the District Registrars appointed to the twenty-two registration districts, and other persons authorised to perform marriages.

After a marriage the celebrant is required to forward the official certificate of marriage to the Principal Registrar who maintains at his office a register of all marriages celebrated in South Australia. In addition, a copy of the marriage certificate is forwarded by the office of the Principal Registrar to the District Registrar who maintains a register of the marriages celebrated in his district.

The total marriages and marriage rates for selected years from 1846 are shown in the Statistical Summary, Appendix A. Particulars relating to first marriages, remarriages and crude marriage rates for the last five years are shown in the following table. The crude marriage rate rose throughout the sixties from 6.99 in 1960 to 9.38 in 1970, but since then has gradually declined to a level of 8.84 in 1974. However, the crude marriage rate does not take into account changes over time in the age distribution of the population. Influences underlying the increase during the sixties include the upsurge of births immediately following the 1939-45 War, together with the effects of post-war immigration.

Previous Marital Status of Persons Marrying, South Australia

	V	Year		Bridegrooms			Brides	Total	Rate (a)	
			Bachelor	Widower	Divorced	Spinster	Widow	Divorced	Marriages	Kale (a)
1970 1971 1972 1973 1974		• •	9 900 9 865 9 779 9 649 9 538	333 310 323 309 353	631 658 727 848 878	9 961 9 822 9 798 9 716 9 560	339 365 359 349 388	564 646 672 741 821	10 864 10 833 10 829 10 806 10 769	9·38 9·21 9·10 8·99 8·84

<sup>(</sup>a) Per 1 000 of mean population.

Since 1970 the absolute numbers of both brides and bridegrooms marrying for the first time has decreased but the number of divorced persons remarrying has risen substantially, bridegrooms by 39 per cent and brides by 46 per cent.

Age at Marriage and Previous Marital Status, South Australia, 1974

	Previous Marital Status										
Age		Bridegre	ooms	Brides							
	Bachelor	Widower	Divorced	Total	Spinster	Widow	Divorced	Total			
Under 21 years	1 968	_		1 968	5 308		4	5 312			
21 to 24 years	4 939	<del>-</del>	31	4 970	3 178	10	84	3 272			
25 to 29 years	1 942	7	205	2 154	820	24	201	1 045 323			
30 to 34 years	399	8	192	599	128	26 30	169 112	323 193			
35 to 39 years	112	.8	128	248	51		93				
40 to 44 years	64	13	108	185	28	22		143			
45 years and over	114	317	214	645	47	276	158	481			
All ages	9 538	353	878	10 769	9 560	388	821	10 769			

During 1974 the median age (that age at which one half of the total number of persons are below the age and the other half exceed it) of persons marrying for the first time was 22.9 years for bachelors and 20.7 years for spinsters, a difference of 2.2 years. The following table shows median ages for the last five years of all persons marrying, classified by marital status at the time of marriage.

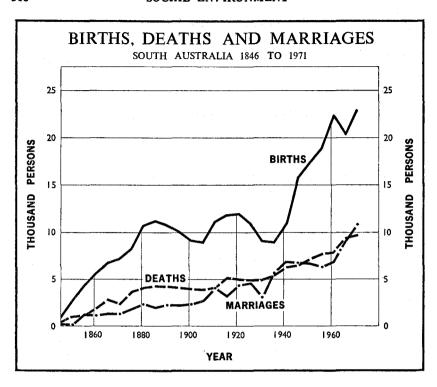
Median Age at Marriage and Previous Marital Status, South Australia

	]	Median A	ge of Bride	egrooms (Y	Median Age of Brides (Years)					
Year		Bachelor	Widower	Divorced	Total	Spinster	Widow	Divorced	Total	
1970		23·1	59·2	39·1	23.4	21.0	53.1	35.6	21.2	
1971		23.0	58.8	38.0	23.3	20.8	51.2	34.3	21.1	
1972		23.0	58.5	38.0	23.4	20.8	52.4	33.3	21 · 1	
1973		22.9	58.3	36.4	23.4	20.7	51.6	33.4	21 · 1	
1974		22.9	59 • 4	35.4	23.4	20.7	53.1	33.6	21.1	

The following table highlights the tendency for brides to marry bridegrooms older than themselves. Although the age difference has narrowed over the past decade, this phenomenon, together with the greater life expectancy of females compared to males as shown in the table on page 155, tends to perpetuate the predominance of aged widows over widowers within community and welfare institutions.

Relative Age Differences of Parties to Marriage, South Australia

Pides Bestson of Maurices	Numl	er of Marr	iages	Proportion	n of Total I	Marriages
Elder Partner of Marriage —	1972	1973	1974	1972	1973	1974
Bridegroom:					Per cent	
8 years or more	918 296 470 705 976 1 440 1 736 1 681	945 348 496 678 1 005 1 403 1 702 1 593	946 348 489 667 968 1 356 1 661 1 606	8·5 2·7 4·3 6·5 9·0 13·3 16·0 15·5	8·7 3·2 4·6 6·3 9·3 13·0 15·8 14·7	8.8 3.2 4.5 6.2 9.0 12.6 15.4 14.9
Bride:						
1 year	562 280 187 117 238 1 223	600 329 179 118 216 1 194	624 329 202 104 259 1 210	5·2 2·6 1·7 1·1 2·2 11·3	5·6 3·0 1·7 1·1 2·0 11·0	5·8 3·1 1·9 1·0 2·4 11·2
Total	10 829	10 806	10 769	100-0	100-0	100-0



### MARRIAGE OF MINORS

The Marriage Act 1961-1973 stipulates the marriageable age to be eighteen years or over for a male and sixteen years or over for a female. Under exceptional circumstances a judge or magistrate can, upon application by a party who has not attained marriageable age but who is at least sixteen in the case of a male or fourteen in the case of a female, authorise him or her to marry a particular person who is of marriageable age.

Before 1 July 1973 prior consent had to be obtained from either both parents, one parent, a guardian or guardians, or other prescribed authority, according to the circumstances, where a party to a marriage was under twenty-one years. From 1 July 1973 the age of majority for purposes of the Marriage Act was reduced to eighteen years.

The proportion of persons marrying under 21 years of age has changed significantly since details were first recorded in 1903. In that year 2.7 per cent of males and 19.2 per cent of females marrying were under twenty-one years of age. Over the years the proportion of males has ranged from a low of 2.6 per cent in 1916 to a high of 18.3 per cent in 1974. The corresponding proportions for females were 14.7 and 49.3 per cent recorded in 1919 and 1974 respectively.

Figures relating to the marriages of persons under twenty-one years of age for the five years to 1974 are shown in the following table.

Marriages of Persons Under 21 Years of Age, South Australia

<b>V</b>			A	ge in Ye	ars			T-4-1	D	
Year	Under 15	15	16	17	18	19	20	Total Under 21	Percentage of Total Marriages	
					BRIDE	GROOMS	3			
1970		= -	2 1 8 4 7	26 25 26 24 27	244 247 241 257 282	568 576 524 554 567	878 938 1 002 1 091 1 085	1 718 1 787 1 801 1 930 1 968	15·8 16·5 16·6 17·9 18·3	
					BRI	DES				
1970	3 1 3 1	13 20 15 8 12	196 212 221 215 195	510 491 514 487 463	1 025 1 133 1 077 1 220 1 249	1 585 1 601 1 578 1 682 1 635	1 698 1 745 1 780 1 690 1 757	5 027 5 205 5 186 5 305 5 312	46·3 48·0 47·9 49·1 49·3	

### MARRIAGE RITES

The number of marriages performed by civil officers in South Australia during the decade from 1960 to 1969 accounted for 10.9 per cent of all marriages but reached a record level of 22.0 per cent in 1974. The increase in civil ceremonies during the 1970s is evident from the following table, and can partly be accounted for by the improved facilities now provided at the office of the Principal Registrar of Births, Deaths and Marriages.

Marriages: Marriage Rites, South Australia

Rites	Number of Authorised Celebrants	Number of Marriages			Proportion of Total Marriages		
	January 1974	1972	1973	1974	1972	1973	1974
Denomination:						Per cent	
Baptist Catholic Church of England Churches of Christ Congregational Lutheran Methodist Orthodox Presbyterian Salvation Army Seventh Day Adventist Other denominations	72 274 197 63 49 136 209 14 29 36 8	296 2 193 2 052 319 290 603 2 460 166 348 61 29 251	236 2 089 1 867 316 290 596 2 347 169 309 73 20 227	260 2 138 1 796 289 262 607 2 240 164 295 68 30 255	2·7 20·3 18·9 2·9 2·7 5·6 22·7 1·5 3·2 0·3 2·3	2·2 19·3 17·3 2·9 2·7 5·5 21·7 1·6 2·8 0·7 0·2 2·1	2·4 19·9 16·7 2·7 2·4 5·6 20·8 1·5 2·7 0·6 0·3 2·4
Total	1 229	9 068	8 539	8 404	83.7	79-0	78-0
Civil Ceremonies	31	1 761	2 267	2 365	16-3	21.0	22-0
Grand Total	1 260	10 829	10 806	10 769	100-0	100-0	100-0

### 6.8 DIVORCE

### LEGISLATION

The Supreme Court of South Australia had exclusive jurisdiction in divorce from 1 January 1859, the date upon which the Matrimonial Causes Act, 1858 came into operation. This continued under the Matrimonial Causes Act 1959-1974 which came into operation on 1 February 1961 and provided uniform legislation throughout Australia for dissolution of marriage and other matrimonial causes, vesting in the Supreme Courts of the States and Territories jurisdiction to hear and determine causes under the Act. The Family Law Act 1975 (see page 324) introduced changes during 1976.

Dissolution of marriage (commonly known as divorce) has been the principal form of relief petitioned for and granted by the Court, but its jurisdiction also provides for petitions for nullity of marriage, judical separation, restitution of conjugal rights and jactitation of marriage.

A decree of dissolution of marriage and, in some instances, of nullity of marriage is in the first instance a decree nisi. In general a decree nisi automatically becomes absolute after a given period, unless it has been rescinded by the Court, an appeal has been instituted, or there are children of the marriage in respect of whom proper arrangements have not been made for welfare, advancement and education.

It should be noted that fluctuations from year to year in the number of decrees granted may be independent of fluctuations in the number of petitions filed, because there is a considerable variation in the number of actions waiting to be heard at the end of each year.

### PETITIONS FILED

Particulars of petitions filed during the five years to 1974 are shown in the following table. In each of these years petitions for dissolution lodged by wives outnumbered those lodged by husbands, a pattern which has prevailed for over fifty years.

Dissolution of Marriage and other Matrimonial Causes
Petitions Filed, South Australia

	Dissolution	on of Marria	ıge			Total
Year	By Husbands	By Wives	Total	Nullity of Marriage	Judicial Separation	Petitions (a)
1970	507	858	1 365	7	4	1 380
1971	622	1 026	1 648	5	9	1 668
1972	727	1 250	1 977	6	6	1 997
1973	809	1 326	2 135	7	12	2 159
1974	855	1 405	2 260	3	6	2 272

<sup>(</sup>a) Includes petitions filed for dissolution or nullity; 1970, 2; 1971, 2; 1972, 4; 1973, 5; 1974, 2 and petitions lodged for dissolution or judical separation: 1970, 2; 1971, 4; 1972, 4; 1974, 1.

### **DECREES GRANTED**

The table below shows the number of decrees absolute granted for dissolution and nullity of marriage and decrees granted for judicial separation.

Dissolution of Marriage and other Matrimonial Causes
Decrees Absolute Granted, South Australia

	Dissolut	ion of Marr	iage	NT-11:4 of	Judicial
Period	To Husbands	To Wives	Total	- Nullity of Marriage	Separation
Annual Average:					
1946-50	317.0	329.0	646.0	3.6	1.6
1951-55	262.8	350.0	612.8	4.6	1.2
1956-60	244.2	294.2	538.4	7.6	1.6
1961-65	334.6	446.8	781.4	4.6	0.6
1966-70		599-2	963-0	5.8	1.8
Year:					
1970	354	585	939	1	2
1971	473	791	1 264	8	2 3
1972	479	756	1 235	4	2
1973	585	997	1 582	6	
1974	605	956	1 561	4	1

In the table which follows details of the grounds on which final decrees have been granted are shown for the years 1970 to 1974.

Dissolution of Marriage: Grounds on which Final Decrees were Granted South Australia

	South	Austra	II.a				
Ground	1970	1971	1972	1973		1974	
Ground	1970	19/1	1972	1973	To Husband	To Wife	Total
			Dissolu	TION OF	Marriage		
Single grounds:  Descrition Adultery Separation Cruelty Drunkenness Other single grounds	329 279 142 144 16 8	437 446 160 174 27 4	430 459 149 161 18 2	489 634 182 237 22 5	207 319 69 4 4	308 322 102 192 22 2	515 641 171 196 26 3
Dual grounds:           Desertion and;           Adultery           Separation           Cruelty           Drunkenness           Cruelty and;	3 7 1 1	2 3 1	$-\frac{\frac{2}{2}}{1}$	4 1 1 1	1 	1 2 	
Drunkenness	<mark>8</mark>	9 1 —		$-\frac{5}{1}$	_	5 	
Total	939	1 264	1 235	1 582	605	956	1 561
Bigamy	=_1	3 1 3 1	Nullr 1 1 1	ry of M 1  5	ARRIAGE  1 1 1	_ 	- 1 3
Total	1	8	3	6	2	2	4

### Dissolution of Marriage: Grounds on which Final Decrees were Granted South Australia (continued)

Curana 3	1970	1071	1972	1973		1974			
Ground	1970	1971	1972	1773	To Husband	To Wife	Total		
			Judic	IAL SEPA	RATION				
Adultery	_1	1	1	_	_	1	<b>—</b> ,		
Other grounds	1		_	_	_				
Total	2	3	2	_		1	1		
·	ALL DECREES								
Total	942	1 275	1 240	1 588	607	959	1 566		

Information of the relative ages at marriage of husbands and wives for marriages dissolved in 1974 is contained in the following table.

### Dissolution of Marriage: Decrees Absolute, Ages of Parties at Time of Marriage, South Australia, 1974

Age of Husband -	Age of Wife at Marriage								
at Marriage	Under 20	20-24	25-29	30-34	35-39	40-44	45 and Over	Not Stated	– Total Husband
Under 20 20-24 25-29 30-34 35-39 40-44 45 and over Not stated	160 428 72 8 4 1	30 446 135 34 13 1	1 32 48 24 11 2 1		1 3 2 11 5 6	1 1 2 3 4 5	1 1 4 18	1 1 1	191 910 268 77 54 23 34
Total wives	674	659	119	36	28	17	24	4	1 561

The following table shows the duration of marriage, i.e. the interval between marriage and the date the decree was made absolute, for marriages dissolved during the five years to 1974.

### Dissolution of Marriage: Decrees Absolute, Duration of Marriage South Australia

Year —	Duration of Marriage (Years)									
Tear —	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 and Over	Total
1970	94 108 137 175 150	250 380 380 507 523	182 247 228 313 325	157 185 158 217 213	108 169 159 176 149	93 100 100 114 118	32 54 53 50 51	15 11 13 23 20	8 10 7 7 7 12	939 1 264 1 235 1 582 1 561

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For marriages dissolved in 1974 the following table shows the relative ages of husbands and wives at the time of dissolution.

Dissolution of Marriage: Decrees Absolute, Ages of Parties at Time of Dissolution, South Australia, 1974

Age of	Age of Wife at Dissolution								- Total
Husband at Dissolution	Under 25	25-29	30-34	35-39	40-44	45-49	50 and Over	Not Stated	Husbands
Under 25	62	13							75
25-29	138	207	21	2		_		_	368
30-34	12	151	140	9	1	. 1			314
35-39	2	30	97	89	5	1	_		224
40-44	1	5	16	73	56	11	2	1	165
45-49			8	19	65	55	16		163
50 and over		1	2	7	26	64	147	1	248
Not stated	_		_	_	1	1		2	4
Total wives	215	407	284	199	154	133	165	4	1 561

Information collected for petitions filed covers living 'children of the marriage' under twenty-one years of age, which, as defined in the Act, includes also adopted children, children of the husband and wife born before marriage and children of either the husband or the wife if members of the household.

The following table shows the number of children of marriages related to duration of marriage for decrees absolute for dissolution granted in 1974.

Dissolution of Marriage: Decrees Absolute

Duration of Marriage and Number of Children of the Marriage

South Australia, 1974(a)

Donation of			Marriage	s Dissol	ved With			Total	Total
Duration of Marriage (Years)	No Children	1 Child	2 3 Children Children		4 5 Children Children			Dissolu- tions	Children
Under 5 5-9 10-14 15-19 20-24 25-29 30-34 35 and over	101 174 39 26 15 36 33 25	39 191 56 22 29 32 8 6	7 125 141 71 44 24 5	2 25 64 53 33 17 4	1 7 19 29 12 5	5 10 8 3 1	1 1 2 8 1	150 523 325 213 149 118 51 32	63 551 638 501 355 173 35
Total dissolutions	449	383	418	198	73	27	13	1 561	
Total children	****	383	836	594	292	135	84	••	2 324

<sup>(</sup>a) Number of children living and under 21 years at time of petition.

The following table shows particulars of the number of children of marriages dissolved in the five years to 1974.

## Dissolution of Marriage: Decrees Absolute, Children of the Marriage South Australia(a)

		Nu	mber of	Marriages	Dissolve	d With			77-4-1
Year	No Children	1 Child	2 Children	3 Children	4 Children	5 Children	6 or more Children	Total Dissolu- tions	Total Children
1970	283 329 349 464 449	196 305 301 366 383	228 314 293 416 418	131 171 172 212 198	53 86 78 78 78	32 42 26 27 27	16 17 16 19	939 1 264 1 235 1 582 1 561	1 517 2 116 1 949 2 408 2 324

(a) Number of children living and under 21 years at time of petition.

### THE FAMILY COURT (SA REGISTRY)

The South Australian Registry of the Family Court of Australia, constituted under the Family Law Act 1975, commenced operations on 5 January 1976. The Family Court has jurisdiction to hear all applications in relation to matrimonial causes on or after that date, although the Supreme Court had a concurrent jurisdiction and continued until 31 May 1976 to deal with applications presented before but still outstanding at that date.

In cases where the need for proceedings can be avoided, applicants are encouraged to seek help from marriage counsellors attached to the Family Court, or from voluntary marriage guidance organisations, before application.

Under the provisions of the Family Law Act the sole ground for dissolution of marriage is irretrievable breakdown, established by twelve months separation.

As well as the hearing of applications for dissolution, other matrimonial causes within the jurisdiction of the Court include maintenance, custody, property settlement, enforcement and injunction proceedings.

Maintenance entitlement is determined largely by the needs of the applicant, and the capacity of the respondent to pay. Any transfer or settlement of property also is taken into consideration.

In custody proceedings the welfare of the children is regarded as paramount. The Court can order that a child be separately represented in matters affecting his custody or maintenance. If the proceedings are contested, both parties may be referred to a welfare officer, in which event, a report on the child's circumstances may be required by the Court. Both parties are considered liable for the maintenance of the child, according to their respective financial resources.

The Court also has the power to settle disputes over matrimonial property. In deciding whether to order a transfer of settlement the Court takes into account any maintenance order and the effective contribution of each party to that property.

The hearing of applications for dissolution of marriage commenced on 1 March 1976, although the hearing of other matrimonial causes commenced earlier.

PART 7

### LABOUR

### 7.1 EMPLOYMENT

### THE LABOUR FORCE

Particulars of the number of persons who constitute the labour force in South Australia are available from periodic population censuses. For the 1966 Census the definition of the labour force was revised to accord with the recommendations of the Eighth International Conference of Labour Statisticians, and the revised approach was retained for the 1971 Census. The major factor in this change was the inclusion of a number of females working part-time who did not previously consider themselves as 'engaged in an industry, business, profession, trade or service'.

In the first table on page 326 population at the 1966 and 1971 Censuses is classified by occupational status, which refers to the status of each person in his or her occupation e.g. employer, worker on own account, working for wages, etc. Those persons reporting themselves as not engaged in an industry, business, profession, trade or service take as their occupational status 'not in the labour force'.

The growth in the female proportion of the labour force, evident between the 1954 and 1966 Censuses, has somewhat levelled off with females constituting 30·0 per cent of the labour force in 1971 compared with 29·0 per cent in 1966. However, the proportion of married females in the labour force has continued to increase (from 13·8 per cent in 1966 to 18·9 per cent in 1971).

### Occupational Status of the Population, South Australia Censuses 1966 and 1971

Occupational -	30	June 1966	(a)	30 June 1971			
Status	Males	Females	Persons	Males	Females	Persons	
In labour force:							
Employer	23 747	6 228	29 975	19 468	5 832	25 300	
Self-employed	31 135	7 205	38 340	29 713	8 302	38 015	
Employee	259 105	111 197	370 302	275 292	135 712	411 004	
Helper	1 167	2 613	3 780	1 009	2 240	3 249	
Unemployed	4 464	3 563	8 027	4 682	3 673	8 355	
Total labour					···		
force	319 618	130 806	450 424	330 164	155 759	485 923	
Not in labour force	228 912	412 539	641 451	255 887	431 897	687 784	
Total popu-							
lation	548 530	543 345	1 091 875	586 051	587 656	1 173 707	

<sup>(</sup>a) Excludes full-blood Aborigines.

The following table shows the employed population at the 1971 Census classified by occupation. Occupation refers to the kind of work a person normally performs e.g. carpenter, clerk, and is classified according to the Australian Classification of Occupations which has been adapted from and closely adheres to the principles embodied in the International Standard Classification of Occupations issued by the International Labour Office, Geneva 1958. It contains 11 major groupings subdivided into 72 minor groups further subdivided into 367 individual categories.

Employed Population: Occupation, South Australia, 30 June 1971

_	M	ales	Fer	nales	Per	sons
Occupation Group	Number	Proportion of Total	Number	Proportion of Total	Number	Proportion of Total
		Per cent		Per cent		Per cent
Professional, technical and related workers	27 418	8-42	22 538	14.82	49 956	10-46
managerial workers	27 261	8.38	4 080	2.68	31 341	6.56
Clerical workers	25 980	7.98	43 061	28 31	69 041	14.46
Sales workers	19 211	5.90	20 911	13.75	40 122	8.40
Farmers, fishermen, hunters, timbergetters and related workers	35 069	10.78	7 922	5.21	42 991	9.00
Miners, quarrymen and related workers	1 823	0.56	32	0.02	1 855	0-39
Workers in transport and communication occupations Craftsmen, production-process	21 921	6-74	3 422	2.25	25 343	5.31
workers and labourers (n.e.i.)	140 981	43-31	18 161	11-94	159 142	33-32
Service, sport and recreation workers	11 686	3-59	25 758	16-94	37 444	7.84
Members of armed services, enlisted personnel	3 000	0.92	144	0.10	3 144	0.66
Occupation inadequately des- cribed or not stated	11 132	3-42	6 057	3.98	17 189	3.60
Total employed population	325 482	100-00	152 086	100-00	477 568	100-00

Industry refers to the branch of productive activity, trade or service in which the individual works or carries out his occupation. The Australian Standard Industrial Classification (ASIC), designed primarily as a system for classifying establishments (e.g. individual mines, factories, shops etc.) by industry, was used for the 1971 Census and divides the whole field of industry into twelve major industry groups, which in turn are divided into sixty subdivisions, 157 groups and 519 classes.

In the next table the number of employed males and females aged fifteen years and over at the 1971 Census are classified according to industry in conjunction with occupational status. The proportion of the employed population engaged in agriculture, forestry, fishing, etc. declined from 10·7 per cent in 1966 to 8·6 per cent in 1971. The percentage recorded as employed in manufacturing industries fell from 28·0 in 1966 to 24·4 in 1971 reversing the trend which was evident between 1933 and 1966.

Employed Population 15 Years and Over: Industry and Occupational Status
South Australia
Census 30 June 1971

			Employed		
Industry Group	Employer	Self- Employed	Employee	Helper	Total
			MALES		
Agriculture, forestry, fishing, etc	5 474 48 1 217	15 709 503 1 030	10 830 2 816 90 798	619 61 17	32 632 3 428 93 062
Electricity, gas and water	3 2 644 5 715 714	3 592 4 396 1 755	8 242 27 209 45 421 17 732	13 59 8	8 247 33 458 55 591 20 209
Transport and storage	1 208	12 854	6 826 13 854 13 479	23	6 842 15 939 13 479
Community services	1 100 1 105 236	253 872 735	22 683 6 459 8 943	54 32 123	24 090 8 468 10 037
Total males employed	19 468	29 713	275 292	1 009	325 482
			FEMALES		
Agriculture, forestry, fishing, etc	1 386 7	3 747 33	2 057 295	1 083 5	8 273 340
Manufacturing	289 1	316 1	22 892 508	54	23 551 510
Construction	292 2 412 115	188 2 432 171	1 244 33 447 2 521	67 364 24	1 791 38 655 2 831
Communication	161	226 —	2 182 11 789 5 714	22 —	2 195 12 198 5 714
Community services	205 907 56	365 630 182	35 346 13 125 4 592	166 99 355	36 082 14 761 5 185
Total females employed	5 832	8 302	135 712	2 240	152 086

### Labour Force Survey

In addition to complete census counts, estimates of the civilian labour force are prepared each quarter from the results of surveys conducted at a sample of dwellings throughout Australia. These surveys began in 1960 and were initially

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confined to the six State capital cities, but in 1964 were extended to include non-metropolitan urban and rural areas, thereby enabling derivation of estimates of the total civilian labour force in Australia. The proportion of the population included in the surveys varies from State to State (1 per cent in South Australia) but in aggregate about 0.67 per cent of the Australian population is included.

Statistics obtained from the surveys include numbers employed and unemployed; labour force participation and unemployment rates; duration of unemployment; analyses of reasons for 'under employment'; as well as age, sex, occupation and industry characteristics.

The following table shows, for South Australia, quarterly estimates of the employment status of the civilian population fifteen years of age and over from February 1974 to November 1975, based on the 1971 Census.

Civilian Population 15 Years of Age and Over: Employment Status South Australia

	In Labour Force					- Not in	Civilian Popu-
Month		Employed		Un- - employed	Total	Labour Force	lation Aged
	Agri- culture	Other Industries	Total	- employed	Total	Force	15 years and Over
,			ľ	MALES ('000)	,		
974 Feb	30.3	322.8	353.1	3.4	356.6	72.5	429.1
May	30-9	316-2	347·1	3.0	350-1	78-7	428.8
Aug	30.9	317.6	348.5	4.9	353.4	80∙1	433.5
Nov	30.3	319.7	350.0	7.6	357.6	80∙6	438-3
975 Feb	32.1	319-4	351.5	10.5	362∙0	79.5	441.5
May	31.9	318.4	350.3	9.0	359-3	82.1	441.4
Aug	31.0	317.5	348.5	9.9	358.4	85.8	444.2
Nov	31.5	316·4	347-9	12.5	360-4	85-9	446.3
			$\mathbf{F}$	EMALES ('000	)		
974 Feb	9.2	174.9	184.1	6.9	191.0	252.1	443.1
May	7.3	177-4	184∙6	4.0	188.6	256.2	444.8
Aug	5⋅8	175·7	181.5	6.4	187.9	260-6	448.5
Nov	7.3	181.6	189.0	8.3	197.3	256.0	453.3
975 Feb	8.3	178.8	187-1	12.7	199.8	257.8	457-6
May	7.3	178.3	185.6	9.4	195.0	261 6	456.6
Aug	7.1	177·7	184.8	10.8	195.6	260.4	456.0
Nov	7.9	187-9	195.8	10.5	206·4	251.4	457·8
	•		P	ersons ('000	)		
974 Feb	39.5	497-7	537-2	10.4	547.6	324.6	872-1
May	38.1	493.6	531.7	7.0	538-7	334.9	873.6
Aug	36.7	493.3	530-0	11.3	541.3	340.7	882.0
Nov	37.6	501.4	539.0	15.9	554.9	336.6	891.5
975 Feb	40.4	498.2	538.6	23.2	561.9	337.3	899.1
May	39.3	496·6	535.9	18.4	554.4	343.6	898.0
Aug	38.0	495.3	533.3	20.7	554.0	346.2	900.2
Nov	39.4	504.4	543.8	23.0	566.7	337-3	904.1

Since the estimates are based on a sample, they may differ from the figures that would have been obtained from a complete census using the same questionnaire and procedures. One measure of the likely difference is given by the standard error, which indicates the extent to which an estimate might have varied by chance because only a sample and not the whole population was enumerated. The smaller the estimate the higher is the relative standard error. For example, the relative standard error of an estimate for South Australia of 500 000 persons is approximately 1.0 per cent (5000), while that of an estimate of 3000 is approximately 20 per cent (600). There are about two chances in three that a sample estimate will differ by less than one standard error from the figures that would have been obtained from a comparable complete enumeration, and about nineteen chances in twenty that the difference will be less than two standard errors. Further details may be obtained from bulletins relating to the surveys which are discussed in the following pages.

Estimates for the period from August 1966 have been revised recently using the results of the 1971 Census rather than those of the 1966 Census used in earlier estimates. This has resulted in a small reduction in the size of estimates of the labour force.

The definition of the labour force used in the Population Census is similar to that used in the survey. However, evidence from census post-enumeration surveys indicates that the personal interview approach as used in the quarterly survey, tends to identify a larger number of persons as being in the labour force than does the filling in of the questions on the census schedule by the householder, and that this tendency increased between the 1966 and 1971 Censuses. These considerations should be borne in mind when comparisons of the total labour force or labour force participation rates are made between the 1966 and 1971 Censuses, or between the 1971 Census and the 1971 labour force quarterly estimates.

Further details may be obtained from the following bulletins issued quarterly by the Australian Statistician: *Unemployment, Preliminary Estimates* (reference 6.35); *The Labour Force* (*Preliminary*) (reference 6.32); *The Labour Force* (reference 6.20).

### Special Studies

The sample of dwellings referred to in respect of the Labour Force Survey has provided the framework for a number of special studies. These have recently included: measures of the extent of employed persons' coverage by superannuation schemes; the incidence of chronic illnesses, injuries and impairments; some indications of the time and means of travel to work and school; the frequency of pay of wage and salary earners; the amount and timing of paid annual leave taken by wage and salary earners; incomes of individuals and families in 1973-74; the distribution of weekly earnings in August 1975; information about changes of employment or job location and other aspects of the mobility of the labour force. Brief summaries of some of these studies are given in the following pages.

Since the estimates provided in these studies are based on sample surveys they are subject to sampling error, the magnitude of which is described in some detail in the bulletins for each topic published by the Australian Statistician.

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### Chronic Illnesses, Injuries and Impairments

In May 1974 the quarterly labour force survey was extended to obtain information about the incidence of chronic illnesses, injuries and impairments in the population, the nature of these conditions and the extent to which they handicapped the sufferers in their daily life.

The following table provides estimates of the number of persons reporting any chronic condition.

Persons Suffering from Chronic Illnesses, Etc., May 1974(a)

State or Territory		Persons Chronic II		Persons with a Chronic Limiting Illness, etc.	
	(a) - ('000)	Number ('000)	Rate (b)	Number ('000)	Rate (b)
		MA	LES		
New South Wales Victoria Queensland South Australia Western Australia Tasmania Northern Territory Australian Capital Territory	2 355·4 1 794·0 977·1 601·9 554·2 199·8 53·5 88·1	634·0 454·5 276·1 167·6 149·5 50·8 11·6 24·8	269·2 253·3 282·6 278·5 269·8 254·3 216·8 281·5	217·9 157·8 80·9 49·4 46·9 18·9 2·8 5·9	92·5 88·0 82·8 82·1 84·6 94·6 52·3 67·0
Australia	6 624.0	1 768.8	267.0	580-4	87-6
New South Wales Victoria Queensland South Australia Western Australia Tasmania Northern Territory	46.2	FEMA 684·5 486·9 302·2 186·1 151·0 53·1 9·3 27·7	288·7 268·6 310·8 305·6 283·9 266·0 201·3 316·9	223·1 169·9 85·3 52·7 47·4 16·9	94·1 93·7 87·7 86·6 89·1 84·7
Australian Capital Territory Australia	87·4 6 630·0	1 900.8	286.7	602.4	64·1 90·9
		PERS	SONS		
New South Wales Victoria Queensland South Australia Western Australia Tasmania Northern Territory Australian Capital Territory Australia	175.5	1 318·4 941·4 578·3 353·8 300·5 103·9 20·8 52·4 3 669·6	278·9 261·0 296·7 292·2 276·7 260·1 208·6 298·6 276·9	440·9 327·8 166·2 102·1 94·3 35·7 4·2 11·4 1 182·8	93·3 90·9 85·3 84·3 86·8 89·4 42·1 65·0 89·2

<sup>(</sup>a) Excludes members of permanent armed forces and certain diplomatic personnel customarily excluded from census and estimated populations.

<sup>(</sup>b) Number per 1 000 of estimated population in each group.

A condition (illness, injury or impairment) was considered to be chronic if the respondent claimed to be suffering from it at the time of the survey, and to have suffered from it for more than six months. A chronic condition was classified as 'limiting' when the respondent replied in the affirmative to the question 'Are your activities limited in any way as a result of (the chronic condition)?'

Further details may be obtained from the bulletin Chronic Illnesses, Injuries and Impairments, May 1974 (reference 17.3), published by the Australian Statistician.

### Journey to Work and Journey to School

In August 1974 the quarterly labour force survey included questions to obtain information about the means by which persons travelled to work, to school, to university or to other types of educational institutions. The survey also sought information on the time at which they usually left home, the time they spent on the journey and the cost of fares and parking fees (if any) incurred.

The mode of travel used refers to the principal mode and where two or more were required the principal mode was taken as that which was used for the greatest distance. The category 'other' referred to in the table below includes, among other things, travel by taxi or as a pillion passenger on a motor cycle. Persons were asked about the mode they used to travel to work for most days of the survey week. Those whose mode of travel to work was affected by industrial disputes in survey week were asked about their normal pattern.

The following table shows comparisons of the use of several means of transport in capital city statistical divisions and in other areas for each State and for Australia as a whole. The survey indicated that in August 1974, of 429 300 South Australians who travelled to work 313 400 or 73 per cent travelled by car either as driver or as passenger, compared with the national average of 70 per cent. Conversely 14 per cent of South Australians travelling to work did so by public transport compared with 18 per cent for Australia.

Persons who Travelled to Work: Mode of Travel, Capital Cities and Other Areas, August 1974 (Per Cent)

Mode of Travel **NSW** SA WA Vic. Qld Tas. Australia (a) CAPITAL CITIES (b) 29.7 16.9 15.1 19.5 24.3 Public transport: . . . 24.4 20.8 Train.. .. .. .. 16.3 12.8 9.2 3.5 2.5 (c) 11.712.6 6.0 11.4 12.9 12.5 18∙6 10.5 Tram or ferry ... (c) 2.1 0.7 5.6 (c) (c) (c) 7ŝ·ś 71`£ Car: 65.7 69·1 72·6 66.2 61.8 . . . . . . . 58.3 55.5 As driver 51.7 54.1 58.7 61.6 54.5 10.1 11.6 13.6 13.9 13.7 12.9 11.7 As passenger 1.9 0.5 1.6 1.4 1.1 Motor cycle or scooter 1.1 (c)2.5 Bicycle (c) 0.7(c) 0.8(c) 0.75.8 7.9 Walked 6.3 7.9 6.4 5.3 6.7 1.0 0.6 1.5 0.9 1.5 (c) 1.0 Total .... 100·0 100.0 100.0 100.0 100.0 100.0 100.0

# Persons who Travelled to Work: Mode of Travel, Capital Cities and Other Areas, August 1974 (continued)

(Per Cent)

Mode of Travel	NSW	Vic.	Qld	SA	WA	Tas.	Australia (a)
			0	THER AR	EAS		
Public transport:	7.7	3.4	2.5	4.8	5.7	5.4	5.5
Train	1.4	(c)	(c)	(c)	(c)	(c)	0.8
Bus	6.1	2.4	2.2	4.6	<b>3</b> ∙7	<b>5</b> ∙3	4.6
Car:	75.6	80.0	75.8	74.5	79.5	80.2	77-3
As driver	61.8	63.3	58-9	62.6	66.9	65.8	62.5
As passenger	13.7	16.7	16.8	11.9	12.6	14.4	14.9
Motor cycle or scooter	2.5	1.6	3.9	4.6	2.1	(c)	2.6
Bicycle	1.1	2.3	3.5	(c)	(c)	(c)	1.7
Walked	12.0	11.4	12.7	13.2	9 <b>∙</b> 1	10·4	11.5
Other	1.2	(c)	1.7	(c)	2.6	2.1	1.4
Total	100.0	100.0	100.0	100-0	100.0	100.0	100.0

<sup>(</sup>a) Northern Territory and Australian Capital Territory included in 'other areas'.

More details from the August 1974 survey have been published in the bulletin Journey to Work and Journey to School (reference 17.5), released by the Australian Statistician.

### Income Distribution, 1973-74

In November 1974, information on the incomes of families and individuals in 1973-74 was sought from approximately two-thirds of the persons included in the population survey in that month. Results were published by the Australian Statistician separately for families, *Income Distribution*, 1973-74, *Families* (*Preliminary*) (reference 17·27) and for individuals, *Income Distribution* 1973-74 *Part* 1 (reference 17·6). The results of a similar survey conducted in November 1969 were published in *Income Distribution* 1968-69 (reference 17·17).

Income was defined to include all income received while living in Australia, including income from overseas sources and all income received from an Australian source while living overseas. Questions were asked on the amount of income received in 1973-74 from each of the following sources: (1) money wages or salary; (2) own business, trade or profession (net income); (3) share in partnership (net income); (4) government social service benefits; (5) superannuation or annuity; (6) interest, dividends, rent, etc.; (7) other sources, e.g. trust or will, maintenance or alimony. Gifts or donations such as might be made by relatives, friends or charitable organisations were not included, even though such gifts or donations may have been the sole means of support. The definition of income is the same as that used for the 1968-69 survey.

The average South Australian family income in 1973-74 was \$8 270, an increase of 72 per cent over the figure for 1968-69 (\$4 820), and \$510 less than the 1973-74 Australian average (\$8 780).

<sup>(</sup>b) Statistical divisions.

<sup>(</sup>c) Based on estimates subject to sampling variability too high for most practical purposes.

Family Income and Family Size, South Australia, 1973-74

Total Family Income (a)		Number i	n Family		Total
Total Family Income (a) -	2	3	4	5 and Over	Total
\$		,0	000 families		
Under 2 000	6∙5 ∖	5.1	3⋅3 ∫	) (	11.4
2 000 and under 3 000	(b) 20·5 ∫		ኚ	} 3.6 ₹	25.5
3 000 and under 4 000	9.6	4∙6 ∖	6∙0 ∫	) [	17.8
4 000 and under 5 000	7⋅8	5∙2 ∫	Ì	3.4	20.8
5 000 and under 6 000	11.9	5.9	7.4	6∙6	31.9
6 000 and under 7 000	11.7	7.7	10⋅3	7.2	36.9
7 000 and under 8 000	10.3	7.9	9.0	5⋅8	33.0
8 000 and under 9 000	11.1	5.9	8.7	6∙4	32.2
9 000 and under 10 000	7.2	5⋅3	6.9	7.2	26.7
10 000 and under 12 000	10∙9	9.9	8.9	11·4	41·1
12 000 and under 15 000	6.0	6∙4	7.7	8.0	28.2
15 000 and over	4.0	4.7	7.1	8.8	24.6
Total	117-6	68.6	75-4	68-4	330.0
<del>-</del>			Dollars		
Median income	6 220	7 770	8 180	9 140	7 650
Mean income	6 680	8 390	9 090	10 000	8 270

<sup>(</sup>a) Family income is the sum of the incomes received from all sources by all members of the family for whom particulars of income were obtained.

### Job Tenure

In February 1975 a survey based on the quarterly population survey was conducted throughout Australia to classify estimates of employed persons according to the length of time they had been in the job held in February 1975.

Employed Persons: Duration of Current Job, South Australia, February 1975

Demotion of Comment Joh	Malaa		Females		- All	
Duration of Current Job	Males	Married Women	Other Females	Total	Persons	
			Per cent			
Under 3 months	6.8	10.8	15.1	12.2	8.7	
3 months and under 6 months	3.8	5.3	6.9	5.8	4.5	
6 months and under 1 year	6.9	12.3	13.7	12.8	9.0	
Total under 1 year	17.6	28.4	35.7	30.9	22.2	
1 year and under 2 years	12.3	17.2	21.4	18.7	14.5	
2 years and under 3 years	7.3	11.5	14.2	12.4	9-1	
3 years and under 4 years	5.9	8.7	5.7	7.7	6.6	
4 years and under 5 years	5.5	5.7	4.7	5.3	5.5	
5 years and over	51.3	28.5	18-3	25.0	42.2	
Total	100.0	100.0	100-0	100-0	100.0	

<sup>(</sup>b) These numbers include married couple families whose major source of income is the maximum age pension.

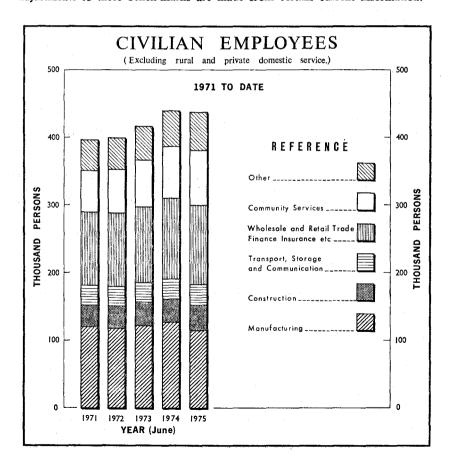
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The above table shows that in February 1975 approximately 18 per cent of males and 30 per cent of females had been in their current jobs for less than a year, while half of the males and one quarter of the females had been in their current jobs for five years or more.

Further information may be obtained in the bulletin, Job Tenure, February 1975 (reference 6.44), published by the Australian Statistician,

### WAGE AND SALARY EARNERS IN EMPLOYMENT

Details of the number of wage and salary earners in civilian employment other than at census dates are available from periodic estimates. These estimates, which exclude employees in agriculture and private domestic service, are based on information obtained at population censuses, known as bench-marks, and adjustments to these bench-marks are made from certain current information.



As results from each successive population census become available it is customary to derive from them (and other relevant sources) new bench-marks for the employment series, and to revise the published estimates for all periods subsequent to the date of the previous census. The estimates in the following tables and bar chart on page 334 are based on bench-marks obtained from the 1971 Census and thus differ from estimates published previously for the same period but which were based on bench-marks obtained from the 1966 Census.

An industry distribution of wage and salary earners derived from these estimates, and beginning with the census year 1971, is presented in the bar chart on page 334. However, the industry classification used in this chart and in the following table is the Australian Standard Industrial Classification (ASIC). This classification is not directly comparable with that adopted for population censuses before 1971 and hence for this reason as well as that outlined in the above paragraph, the estimates of industry dissections shown are not comparable with those previously published. 'Manufacturing' includes employees of manufacturing enterprises who are not directly associated with the productive process, such as sales and distribution personnel. The category 'community services' covers employees in education, health, welfare and other community services while the category 'other' includes employees in mining, electricity, gas and water, public administration and entertainment, restaurants, hotels and personal services.

Estimated employment for June in the years 1971 to 1975 classified by industry group, is given in the following table.

Wage and Salary Earners in Civilian Employment, South Australia(a)

	June	Manufac- turing	Con- struction	Transport, Storage and Communi- cation	Wholesale and Retail Trade	Finance, Insurance, Real Estate and Business Services	Community I Services	Total Employment (Incl. Other)
				Ŋ	MALES ('00	0)		
1971 1972 1973 1974 1975		95·7 93·3 94·4 96·6 89·4	30·8 31·8 33·5 32·6 36·2	24·0 23·6 23·4 24·1 24·5	47·0 46·6 48·2 50·6 50·6	14·7 14·6 14·6 15·8 15·7	23·6 24·9 26·4 28·1 29·8	263·6 263·4 270·5 278·4 278·3
				FE	MALES ('00	00)		
1971 1972 1973 1974 1975		24·9 24·9 27·4 30·5 25·7	1·3 1·3 1·4 1·4 1·5	5·0 4·9 4·9 5·2 5·4	34·6 35·6 36·5 39·5 38·0	12·2 12·1 12·8 13·8 13·4	37·3 39·7 42·9 48·2 51·3	133·5 136·8 145·9 161·0 159·5
				PI	ERSONS ('0	00)		
1971 1972 1973 1974 1975		120·6 118·2 121·8 127·1 115·1	32·1 33·1 34·9 34·0 37·7	29·0 28·5 28·3 29·3 29·9	81·6 82·2 84·7 90·1 88·6	26·9 26·7 27·4 29·6 29·1	60·9 64·6 69·3 76·3 81·1	397·1 400·2 416·4 439·4 437·8

<sup>(</sup>a) Excludes employees in agriculture, private domestic service and defence forces.

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The government sector (government departments, local government authorities, public corporations and public trading and financial enterprises) employs 30 per cent of total civilian wage and salary earners. The following table shows the distribution of wage and salary earners at June 1974 and June 1975 by class of employer.

Wage and Salary Earners in Civilian Employment: Class of Employer South Australia (a)

	June 1974		June 1975				
Males	Females	Persons	Males	Females	Persons		
	'000						
194-6	121.9	316.5	188-2	116-3	304.5		
24.2	7.0	31.2	24.9	7.5	32.4		
54.9	31.1	86.0	58.4	34.5	92.9		
4.7	0.9	5.6	6.8	1.1	7.9		
83.8	39-1	122-9	90·1	43.2	133-3		
278.4	161.0	439.4	278-3	159.5	437.8		
	194·6 24·2 54·9 4·7 83·8	Males Females  194·6 121·9  24·2 7·0 54·9 31·1 4·7 0·9  83·8 39·1	Males         Females         Persons           194·6         121·9         316·5           24·2         7·0         31·2           54·9         31·1         86·0           4·7         0·9         5·6           83·8         39·1         122·9	Males         Females         Persons         Males           194·6         121·9         316·5         188·2           24·2         7·0         31·2         24·9           54·9         31·1         86·0         58·4           4·7         0·9         5·6         6·8           83·8         39·1         122·9         90·1	Males         Females         Persons         Males         Females           194·6         121·9         316·5         188·2         116·3           24·2         7·0         31·2         24·9         7·5           54·9         31·1         86·0         58·4         34·5           4·7         0·9         5·6         6·8         1·1           83·8         39·1         122·9         90·1         43·2		

<sup>(</sup>a) Excludes employees in agriculture, private domestic service and defence forces.

Further information on employment in specific sectors such as factories, agriculture, the building industry etc. is found in the relevant sections of this Year Book.

### UNEMPLOYMENT

For the 1971 Census of Population and Housing, the employed population comprised persons fifteen years of age and over who, in the week before the Census, either worked for payment or profit or had a job from which they were temporarily absent. Persons helping but not receiving wages or salary who usually worked less than fifteen hours a week were excluded from the labour force but included in the unemployed part of the labour force if they looked for work. Unemployed persons were those who were not employed and who were either laid off without pay for the whole week or were actively looking for work.

This approach conformed closely to the recommendations of the Eighth International Conference of Labour Statisticians held in Geneva in 1954 and to the approach used at the 1966 Census. The number unemployed in South Australia as recorded at the 1971 Census was 4 682 males and 3 673 females.

Monthly figures compiled by the Commonwealth Employment Service of the Department of Employment and Industrial Relations provide indicators of movement in the level of unemployment. These figures are a count of the number of persons, registered with the Employment Service for employment on the Friday nearest the end of the month, who claimed at the time of registering that they were not employed, and who were still recorded as unplaced. Included are persons who

have been referred to employers and those who may have obtained employment without notifying the Department. Also available is the number of vacancies, registered by employers, which were recorded as unfilled at the end of the month.

The next table gives the seasonally adjusted number of persons and vacancies registered at the end of each month for the years 1971 to 1975 *i.e.* it does not show the actual numbers unemployed, but a series from which seasonal variations have been removed so that long-term trends can be seen.

Registration with Commonwealth Employment Service, South Australia (Seasonally Adjusted Series) $^{(a)}(b)$ 

M	onth		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Year:				PEI	RSONS	REG	ISTER	ED FO	R EM	IPLOY	MENT	('000')	(c)	
1972 1973 ( 1974	d) .		. 9·7 . 11·6 . 9·2	7·3 11·0 10·3 9·2 23·0	7·7 11·4 10·1 8·6 23·0	8·0 11·6 10·2 8·3 24·9	8·1 11·1 9·8 8·9 22·0	8·2 12·8 9·8 8·6 22·6	8·1 13·1 9·9 9·9 21·7	8·3 14·3 9·4 11·4 24·3	8·8 14·0 9·2 13·1 26·7	8·9 13·1 9·4 16·5 27·5	9·0 12·2 9·5 19·5 28·1	9·4 12·5 9·5 19·4 25·5
						VAC	CANCI	ES RE	GISTE	RED	('000')			
1972 1973 1974		· · · · · · · · · · · · · · · · · · ·	3·0 3·7 6·3	2·9 2·6 4·3 7·2 2·7	2·9 2·6 4·5 6·9 2·7	2·9 2·8 5·1 7·4 3·4	3·2 2·6 5·5 6·0 3·1	3·2 2·5 6·0 5·7 3·5	3·4 2·6 6·2 4·7 3·3	3·6 2·4 6·7 4·6 3·4	3·2 2·6 6·8 4·1 2·8	3·0 2·8 7·3 3·6 2·5	2·5 3·0 6·8 3·3 3·0	2·8 3·2 5·2 2·2 2·1
			E	XCES	SOF	PERSC	NS R	EGIST	ERED	OVE	R VAC	ANCI	ES ('00	0)
1972 1973 ( 1974	d) .		. 6·7 . 7·9 . 2·9	4·4 8·4 6·0 2·0 20·3	4·8 8·8 5·6 1·7 20·3	5·1 8·8 5·1 0·9 21·5	4·9 8·5 4·3 2·9 18·9	5·0 10·3 3·8 2·9 19·1	4·7 10·5 3·7 5·2 18·4	4·7 11·9 2·7 6·8 20·9	5·6 11·4 2·4 9·0 23·9	5·9 10·3 2·1 12·9 25·0	6·5 9·2 2·7 16·2 25·1	6·6 9·3 4·3 17·2 23·4

- (a) Includes Northern Territory.
- (b) Figures are subject to revision.
- (c) Persons who claimed they were unemployed.
- (d) Break in continuity of series from July 1973 because of revised definition of school leavers.

One of the primary functions of the Labour Force Survey (see pages 327-9) is to provide regular and detailed information on unemployment in Australia. The following table shows the number of unemployed persons in South Australia at the time of surveys conducted in August of each year from 1973 to 1975.

Unemployed Persons, South Australia (a)

<b>A</b>		Number		Proportion of Labour Force			
August –	Males	Females	Persons	Males	Females	Persons	
		'000			Per cent	<u> </u>	
1973	4·1 4·9 9·9	5·0 6·4 10·8	9·2 11·3 20·7	1·2 1·4 2·8	2·7 3·4 5·5	1·7 2·1 3·7	

<sup>(</sup>a) Civilians 15 years of age and over.

### **EMPLOYMENT SERVICES**

The Commonwealth Employment Service, administered by the Department of Employment and Industrial Relations, commenced operations in South Australia in May 1946. The main functions of the Employment Service are to assist people seeking employment to obtain positions best suited to their training, experience, abilities and qualifications; and to assist employers seeking labour to obtain employees best suited to the demands of the employers' particular class of work.

Before unemployment benefit can be paid, persons seeking such benefit must be registered with the Employment Service which is responsible for certifying that suitable employment is not available.

Specialised facilities are provided for young people, persons with physical and mental handicaps, ex-members of the defence forces, Aborigines, migrants, rural workers, and persons with professional and technical qualifications. Vocational counselling, provided without charge by psychologists, is available to any person. The Department of Employment and Industrial Relations is also responsible for the administration of the National Employment and Training System (NEAT), a vocational training scheme designed to assist persons whose employment prospects would be enhanced by training.

The Regional Employment Development Scheme (RED) was designed to create employment opportunities in areas of excessive unemployment whether this was because of general economic conditions or a labour market problem in a particular area which could be alleviated by the provision of bridging employment. The scheme, also administered by the Department of Employment and Industrial Relations, came into operation in September 1974 but its operations are now greatly reduced, no new projects having been approved since 10 July 1975. However, the State Unemployment Relief Scheme, administered by the Department of Lands, began operating towards the end of 1975 providing employment opportunities on a basis similar to that formerly provided by the RED Scheme.

The Commonwealth Employment Service is responsible for placing in employment migrant workers sponsored by the Australian Government under the Commonwealth Nomination and similar schemes. This includes arranging for them to move to their initial employment. Experts for overseas service under technical aid programs are recruited by the Employment Service.

In association with placement activities, regular surveys of the labour market are carried out. These include a monthly survey of employment in larger private factories covering a number of factories with 50 or more employees. A survey of the level of overtime and/or short-time being worked is conducted concurrently with this survey.

The Department of Employment and Industrial Relations operates ten Commonwealth Employment Service offices, including a Professional Employment Office, in the metropoliton area and has offices in eight country areas backed up by agents in smaller centres. The South Australian Regional Office of the Department is also responsible for employment offices at Katherine, Alice Springs and Darwin in the Northern Territory. The Professional Employment Offices in Adelaide and Darwin specialise in the placement of the more highly qualified and professional applicants.

There are also a number of private employment agencies, all of which are required to register with the Department of Labour and Industry. At 31 December 1975 there were thirty-six such agencies registered.

### 7.2 ARBITRATION AND INDUSTRIAL ORGANISATIONS

### INDUSTRIAL ARBITRATION

In Australia a unique system of conciliation and arbitration by Governmentestablished tribunals has been developed, with the Australian and the State Parliaments each passing their own industrial legislation.

Under Section 51 of the Constitution, the Australian Parliament may make laws in relation to 'conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State'. In addition the Parliament may legislate under certain industrial powers for the stevedoring industry, the maritime industry, the Australian Public Service, certain national projects, the Snowy Mountains Area and flight crew officers. Federal arbitration is binding only on the parties to a dispute and decisions need not be of general application to an industry.

Employees not specifically covered by Federal awards are subject to State industrial jurisdiction but where an award or determination of a State industrial tribunal is in conflict with an award of a Federal tribunal, the latter prevails.

### Federal Industrial Tribunals

Before 1956 a Court of Conciliation and Arbitration was responsible for the prevention and settlement of industrial disputes extending beyond the limits of any one State. In that year substantial amendments were made to the Conciliation and Arbitration Act separating the judicial and arbitral functions of the Court by the establishment of the Australian Industrial Court and the Australian Conciliation and Arbitration Commission.

The Industrial Court, which is comprised of a Chief Judge and up to nine other Judges, interprets and enforces awards, passes judgment on questions of law and determines questions arising in relation to organisations registered under the Act. Decisions of the Industrial Court are final, although in certain matters an appeal lies to the High Court, but only by leave of the High Court.

The Conciliation and Arbitration Commission comprises a President and as many Deputy Presidents and Commissioners as are necessary.

### State Industrial Tribunals

The South Australian legislation governing State intervention in industrial relations is the Industrial Conciliation and Arbitration Act, 1972-1975, the principal Act having come into operation on 1 January 1973. This Act, which made various changes in the existing industrial law provides for:

- (1) An Industrial Court which deals with matters of law and hears claims for recovery of money payable under awards or agreements;
- (2) An Industrial Commission which makes awards covering workers not under the jurisdiction of Conciliation Committees; and
- (3) Conciliation Committees which make or vary awards for an industry or area of the State in relation to which each Committee is appointed.

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The President and any Deputy President of the Industrial Court are Judges of that Court. The Court itself consists of one or more Judges or the Industrial Magistrate as the President directs. The President and each Deputy President of the Industrial Court are also President and Deputy Presidents respectively of the Industrial Commission. Arbitral functions of the Commission may be exercised by a presidential member or a Commissioner as directed by the President. When required a Full Commission is constituted by either two presidential members and a Commissioner or a presidential member and two Commissioners as directed by the President.

Although the President and Deputy President must be persons eligible for appointment as Judges of the Supreme Court, the four Commissioners appointed by the Governor do not require law qualifications. The Act provides that one-half of the number of Commissioners must be experienced in industrial affairs through association with employers' interests, and the other half must have similar experience by having been associated with trade union affairs.

Conciliation Committees with a Commissioner as chairman are appointed for a three year term by the Minister of Labour and Industry on the recommendation of the President and have the same jurisdiction in industrial matters as the Commission. If the process of conciliation before a Committee fails, then the Chairman sits as a Commissioner to determine the unresolved matters. All awards, both those made by the Commission and those made by Committees, operate as common rules in the industries concerned, unless the Commission determines otherwise.

Provision is made for the Commission, when constituted by a single member, or for the Chairman of a Conciliation Committee, to consult with the President as to whether a matter should be dealt with by the Full Commission and he is required to consult with the President on the application of any party to an industrial matter before him.

There is a right of appeal against awards and decisions of the Commission, when constituted by a single member, or of a Conciliation Committee. The appeal is heard by the Full Commission.

The Industrial Court may hear claims for the recovery of sums due under awards or registered agreements both Federal and State, and claims for long service leave, but it does not have power to award costs against either party. Where the claim has been heard by the Industrial Magistrate an appeal may be heard by a Judge of the Industrial Court.

Proceedings against persons or organisations breaching an award are heard in a Court of Summary Jurisdiction, which is normally constituted by the Industrial Magistrate, although where a question of law is involved the matter may be referred to the Industrial Court.

Proceedings before the Industrial Commission may be commenced by an application submitted by:

- (i) the Minister of Labour and Industry;
- (ii) an employer, or group or registered association of employers in an industry employing in the aggregate not less than twenty employees or 75 per cent of the employees in the industry, whichever is the lesser; or

- (iii) a group or registered association consisting of not less than twenty employees or 75 per cent of the employees within an industry, whichever is the lesser.
- At 31 December 1975 there were six associations of employers and seventy-one associations of employees registered with the Industrial Registrar. Membership of these employee associations totalled approximately 198 000.

The Industrial Conciliation and Arbitration Act, 1972-1975 also provides that every full-time employee shall be entitled to the general standard of annual leave as determined by the Full Commission. It also enables the Industrial Commission to prescribe in awards preference for employment to members of registered associations where all factors relevant to the employment of such members and all other persons affected are otherwise equal. The Act also gives the Court jurisdiction to hear any question as to whether the dismissal of an employee is harsh, unjust or unreasonable, and has power to direct the employer to reinstate the dismissed employee to his former position on terms not less favourable than those held previously.

# EMPLOYEE ORGANISATIONS

At 31 December 1974 there were 135 separate unions operating in South Australia; although a number of unions exist only in this State, branches of interstate or federated unions account for the majority of total membership. Some of these are bound under a system of unification with centralised control while others are practically independent and self-governing, the federal bond existing only for limited specified purposes.

The following table gives particulars of the number of separate unions and union membership for the years 1970 to 1974. The table includes estimated percentages of trade union members to total wage and salary earners in employment. The estimates of total wage and salary earners have been calculated by adding estimates of rural and private domestic employees based on census results to estimates of wage and salary earners which normally exclude rural and private domestic employees. For this reason and because trade union membership includes some persons not in employment, the percentages shown in the table must be regarded as approximations.

Trade	Uni	ions,	South	Australia
	At	31	Decemb	er

Year	Separate Unions		Members			ion of Mer ge and Sala	
	Omons .	Males	Females	Persons	Males	Females	Persons
	No.		'000			Per cent	
1970	137	163-2	39-4	202.7	57	28	48
1971	139	172-1	43.8	215.9	60	31	51
1972	132	171.6	52.1	223.7	60	36	52
1973	135	181.6	60.2	241.8	62	38	53
1974	135	189.4	63.4	252.8	63	38	54

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The central labour organisation for the State is the United Trades and Labor Council of South Australia, and combined union councils exist for Mount Gambier, Port Augusta, Port Pirie, the Upper Murray, Leigh Creek and Whyalla. These central organisations, together with individual unions are affiliated with the Australian Council of Trade Unions (ACTU). All major unions are affiliated with the ACTU, which was founded at an All-Australian Trade Union Congress in 1927. The Trades and Labor Council is the State branch of the ACTU and has the right to appoint one representative to act on the executive of the ACTU.

A historical summary of the growth of the trade union movement in South Australia was included on pages 280-1 of the South Australian Year Book 1969.

#### **EMPLOYER ORGANISATIONS**

In industrial matters there are two dominant employer organisations in the State. These are the South Australian Employers' Federation Inc., which was founded in 1889 and the Chamber of Commerce and Industry (S.A.) Inc., which resulted from the amalgamation in 1972 of the South Australian Chamber of Manufactures Inc. (established in 1869) and the Adelaide Chamber of Commerce Inc. (established in 1839). The Federation and the Chamber provide industrial services for the majority of South Australian employers and employer groups.

The Employers' Federation is an incorporated body being largely a federation of employer associations, although provision is made for individual membership. In 1974 there were thirty-four affiliated associations encompassing some 11 000 employers, and approximately 1 000 individual members. The Federation is maintained by fees paid by members, together with charges made for industrial actions, and from secretarial charges from member associations for which the Federation acts as secretariat. A council, which contains a representative from each of the member associations and a number of personal representatives from member companies, is elected annually. The executive of the Federation is elected by the council.

Services provided by the Federation include the negotiating and drafting of industrial agreements, and the preparation and presentation of cases before Federal and State industrial tribunals. Advice is provided on existing awards and determinations, and on various aspects of industrial legislation. A comprehensive industrial service letter is forwarded to all members and affiliated associations monthly.

The Chamber of Commerce and Industry has 4 000 members who subscribe directly to the Chamber for the industrial and other services provided. Where appropriate, Chamber members are grouped into trade associations, of which eighty are currently active. The Chamber's industrial advocates represent employers before both Australian and State Industrial Commissions in the making and variation of awards, and assist members in the settlement of disputes. The Chamber monitors Bills presented to the Australian and State Parliaments and, where appropriate, makes representations on behalf of its members seeking amendments to the legislation. Research and investigation is continually

being made into the areas where industrial action is likely to occur within the next five to ten years and in other areas where innovation, on the part of employers, can be expected to improve labour relations within their operations.

The principal employers' organisation registered under the provisions of the Australian Conciliation and Arbitration Act is the Metal Industries Association, South Australia (MIASA). The Association represents the varied interests of South Australia's large metal and engineering manufacturing sector by monitoring developments in industrial relations, education and training, trade, economic and legislative matters. MIASA has established branches at Whyalla and the Elizabeth/Salisbury areas, and is affiliated with the Chamber of Commerce and Industry (S.A.) Inc. at the State level and the Metal Trades Industry Association at the national level.

## WORKER PARTICIPATION

In February 1972 two committees were appointed by the South Australian Cabinet to inquire into worker participation in management. One committee was to examine and report on the feasibility of introducing worker participation into industry and commerce in South Australia, the other to examine and report on worker participation in the public sector.

In April 1973 both committees recommended that the Government encourage the introduction of worker participation in management in the form of job enrichment schemes and joint consultative councils, and that a unit should be established in an appropriate Government department to advise and assist management and trade unions on all aspects of worker participation.

Consequently, a Worker Participation Branch was set up in the Department of Labour and Industry and became fully operational in February 1974. Its main role was encouraging the redesign and humanising of jobs, and the development of joint consultation to allow people to become more involved in decisions that affected their working lives. Some developments have occurred in these areas but more especially considerable interest has arisen from all sections of the industrial community and a much higher level of understanding now exists and is continuing to grow among workers, trade unionists and managers.

The experience gained by the middle of 1975 led the Government to reconsider the effectiveness of the arrangements it had initially made in 1974 and it sought advice from various quarters. As a result, a new policy was evolved which was more specific in its provisions and indicated clear guidelines for future developments without being unduly rigid in its approach or imposing any fixed time scale for developments. The modification of the original ideas reflected in the new policy is exemplified by the change of title to Industrial Democracy Unit by which name the Worker Participation Branch is now known. Simultaneously with the adoption of the policy and the change of name, the Unit was transferred from the Department of Labour and Industry to the Premier's Department to reinforce its policy implementation role.

While continuing to encourage the introduction of industrial democracy in both State Government departments and private organisations, activities are being concentrated in the major statutory bodies. These are undertakings which

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have many features in common with private sector organisations. The experience which will be gained in the next few years in such bodies will provide invaluable guidelines on which to base future developments.

## INDUSTRIAL DISPUTES

Details of the number and extent of industrial disputes occurring in South Australia are shown in the next table. Effects on other establishments because of lack of materials, disruption of transport services, power cuts, etc. are not included in these statistics. Particulars of all disputes in progress during the year are included in the annual figures. Consequently, details of the number of disputes and of workers involved in the disputes which commenced in any year, and were still in progress during the following year, are included in the figures for both years. Working days and wages lost are included in the appropriate year. Workers involved in more than one dispute during the year are counted once for each dispute. Because of difficulties in identifying all participants in every dispute the statistics given in the following tables should be regarded as giving only a broad measure of the extent of work stoppages.

Industrial Disputes, South Australia (a)

Period	Disputes	Workers Involved (b)	Working Days Lost	Estimated Loss in Wages
Annual Averages:				\$'000
1951-55	30	17 800	50 500	310·0
	24	12 800	22 400	157·4
	39	18 500	26 000	234·6
	82	45 100	62 600	717·6
Year:  1970	156	57 000	93 100	1 123·1
	135	64 100	111 200	1 484·9
	111	49 800	60 900	858·0
	159	56 900	130 600	2 144·0
	180	116 300	316 500	6 105·1

<sup>(</sup>a) Disputes involving a stoppage of work of ten man-days or more.

In the following table industrial disputes occurring during 1974 are compiled according to the Australian Standard Industrial Classification (ASIC). A dispute involving workers in more than one industry group is counted once only and is included in the industry group which has the largest number of workers involved. Other details are allocated to their respective industry groups.

<sup>(</sup>b) Includes workers indirectly involved at the establishments where the stoppages occurred.

## Industrial Disputes: Industries, South Australia, 1974(a)

Industry	Disputes	Workers Involved (b)	Working Days Lost	Estimated Loss in Wages
		2000	'000	\$'000
Agriculture, forestry, fishing and hunting	2	0.5	0.2	5.9
Mining	2 2	0.2	0.5	11.9
Food, beverages and tobacco	15	7.3	33.5	629-1
Textiles; clothing and footwear	2	1.1	4.2	63-1
Wood, wood products and furniture Paper and paper products, printing and pub-	4	1.8	1-1	22-3
lishing	4	0.3	0.6	13.5
Chemical, petroleum and coal products	4 5	0.8	6.7	140.8
Metal products, machinery and equipment (c)	41	50.3	145.0	2 725.9
Other manufacturing (d)	14	4.0	13.9	267.0
ectricity, gas and water	2	(e)	(e)	1.1
Construction	15	30∙6	58-0	1 278.3
Wholesale and retail trade	15 5	0.4	1.8	32.0
Water transport	36	2.9	5.9	102.7
Railway transport, air transport	5	0.8	1.7	8.4
communication	9	5-2	22.8	468.7
personal services	3	7.4	18.3	293.9
Other industries	16	2.5	2.4	40.4
Total	180	116-3	316-5	6 105-1

- (a) Disputes involving a stoppage of work of ten man-days or more.
- (b) Includes workers indirectly involved at the establishments where the stoppages occurred.
- (c) Includes basic metal products, fabricated metal products, transport equipment and other industrial machinery and equipment and household appliances.
- (d) Includes non-metallic mineral products and leather, rubber and plastic products.
- (e) Less than 50.

# 7.3 WAGES AND HOURS

#### WAGES

Before the National Wage Cases of 1967, wages consisted of two distinct elements, a basic or living wage and a margin or loading which was appropriate to the employee's occupation. A more detailed description of these elements was included on pages 253 and 257-8 of the South Australian Year Book 1967.

The total wage concept was accepted by the decision of the Conciliation and Arbitration Commission in June 1967. The application of this concept, referred to below, has (until the introduction of wage indexation guidelines in 1975) limited the number of national wage cases in any year to one and provided the Commission with a flexible basis for decisions.

## National Wage Fixation

The Conciliation and Arbitration Act 1904-1975 gives the Australian Conciliation and Arbitration Commission power to make an award or to certify an agreement 'making provision for, or altering, rates of wages, or the manner in which rates of wages are to be ascertained, on grounds predominantly related to the national economy and without examination of any circumstance pertaining to the work upon which, or the industry in which, persons are employed'. The Commission holds wage inquiries from time to time with its findings applicable to industrial awards within its jurisdiction. A detailed account of the history of

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national wage fixation before the introduction of the total wage concept appears in the Arbitration Reports and a summary was included on pages 257-60 of the South Australian Year Book 1968.

The National Wage decision handed down by the Commission in May 1974 increased the total wage rates prescribed for adult males and adult females by 2 per cent of current award rates plus a flat amount of \$2.50 per week, with male and female juniors and apprentices receiving proportionate increases. The minimum wage for adult males was increased by \$8 bringing it to \$67.60 per week.

It was also decided to extend the adult male minimum wage to adult females in three stages, commencing at 85 per cent of the male rate, increasing to 90 per cent by the beginning of the pay-period in which 30 September 1974 occurred and to 100 per cent from the beginning of the pay-period in which 30 June 1975 occurred. Thus the minimum wage for adult females was initially \$57.50 per week. On subsequently becoming 90 per cent of the adult male rate, the adult female minimum wage became \$60.80 per week and in December 1974 when the Commission increased the male rate a further \$8 to \$75.60 per week operative from the beginning of the first pay-period commencing on or after 1 January 1975, the female rate rose by \$7.20 to \$68 per week.

In the 1975 National Wage decision, wage indexation loomed as the major issue. The Commission indicated that the critical aspects were the magnitude of pay increases outside indexation and national productivity increases, which in turn depended on what wage fixing principles were selected to operate in conjunction with indexation.

On 30 April 1975 the Commission decided on a 3.6 per cent increase in all award rates, based on the increase in the Consumer Price Index for the March 1975 quarter, to operate from the beginning of the first payperiod commencing on or after 15 May 1975.

The adult male minimum wage was increased by \$4 (inclusive of the 3.6 per cent increase on account of the March 1975 quarter Consumer Price Index) to \$79.60 per week and the female rate increased by \$3.60 to \$71.60 per week.

From the beginning of the pay-period in which 30 June 1975 occurred, the female rate increased to \$79.60 per week, completing the final stage of extending the adult male minimum wage to adult females.

In addition to the increases in award wages granted in the 1975 National Wage decision, the following main indexation principles were put forward:

- (1) Unless persuaded otherwise, award wages would be adjusted each quarter for the most recent movement of the six-capitals Consumer Price Index:
- (2) Any such adjustments would operate from the beginning of the first pay-period commencing on or after the fifteenth of the month following the issue of the quarterly Consumer Price Index;
- (3) The form of indexation would be determined by the Commission in the light of circumstances and submissions received, provided that an increase of less than 2 per cent in any one quarter should be applied fully to all award rates;

- (4) If the movement in the Consumer Price Index were less than 1 per cent in any one quarter no wage adjustment would be made but the movement would be carried forward and adjusted when the accumulated movement equalled 1 per cent or more;
- (5) Increases on account of productivity would be considered by the Commission each year;
- (6) The only other grounds which would justify pay increases were:
  - (a) Changes in work value such as changes in the nature of the work, skill and responsibility required, or the conditions under which the work was performed;
  - (b) Catch-up of community movements.

Submissions on those principles were invited for consideration at the following quarterly hearing.

On 18 September 1975, after debate on various submissions by interested parties and substantial compliance with the indexation principles, the Commission varied all awards and determinations in accordance with the June quarter 1975 increase in the Consumer Price Index of 3.5 per cent, the increase being operative from the beginning of the first pay-period commencing on or after 18 September 1975. The minimum wage was increased by \$2.80 to \$82.40 per week.

The Commission announced that it was not prepared to make any overall recommendation about the indexation of over-award payments, even though it would not be inconsistent with their principles if individual members of the Commission recommended it after hearing the cases of employers and unions concerned. The Commission also said that indexation could not be adopted on a permanent or semi-permanent basis at that time but the future of indexation should be further considered early in 1976.

The 0.8 per cent increase in the Consumer Price Index for the September 1975 quarter was carried forward and considered in conjunction with the 5.6 per cent increase in the December 1975 quarter. Thus on 13 February 1976 the Commission increased wages and salaries prescribed in all Federal awards and determinations by 6.4 per cent as from the beginning of the first pay-period commencing on or after 15 February 1976. This decision increased the minimum wage by \$5.30 to \$87.70 per week and a further decision in March 1976 increased it another \$5 to \$92.70 per week from the first pay-period commencing on or after 1 April 1976.

#### State Wage Fixation

For many years, all awards of both the State Industrial Commission and Conciliation Committees created under the Industrial Conciliation and Arbitration Act, 1972-1975 had included a 'living wage' for both adult male and adult female employees. In determining such living wages, the Full Commission could, as deemed fit, take into consideration any decision of the Australian Conciliation and Arbitration Commission which related to awards of that tribunal and was likely to affect employees subject to awards in South Australia. As such, in May 1975 the Full Commission granted a 3·6 per cent increase in all ordinary award rates to employees under State awards and agreements, being

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a flow-on of the National Wage decision of 30 April 1975. The living wage for adult males was increased to \$48.20 per week and to \$38.60 for adult females.

However, the Industrial Conciliation and Arbitration Act, 1972-1974 provided that no new determination of a South Australian living wage could be made until at least 6 months from the date of the previous determination. Thus in September 1975 the Act was amended to facilitate flows-on from quarterly National Wage decisions by deleting reference to the living wage, award rates thereafter being specified as total wages.

Following a recommendation by the Australian Conciliation and Arbitration Commission concerning indexation of over-award payments, the State Government agreed in late September 1975 to make wage rises due to indexation apply to over-award and service payments for weekly paid Government employees and to back date the decision to 15 May 1975, the beginning of indexation.

In a judgment by the Full Commission in October 1975 it was ruled that the Commission had the power to make 'paid rates' awards as well as 'minimum rates' awards. This judgment means that it is now possible for over-award payments to be built into awards, leading to greater uniformity in wage rates for employees under State awards.

In December 1975, the Full Commission finally adopted the Federal wage indexation guidelines but reserved the right to deal with anomalous situations outside the scope of wage indexation.

# **Equal Pay**

In recent years there have been significant developments in the attitude of government and arbitration authorities towards the awarding of equal pay for male and female employees.

In 1965 the South Australian Government decided to introduce progressively, over five years from July 1966, equal pay for women teachers employed by the Education Department. In 1966 this principle was extended to the State Public Service.

In June 1969 the Australian Conciliation and Arbitration Commission, in what was accepted as a test case, granted equal pay to some women in the meat processing industry, set a timetable for implementation of equality of remuneration by 1 January 1972, and set out principles to be followed by individual commissioners or the Public Service Arbitrator in deciding future applications for the extension of equal pay provisions to other awards. In February 1970, Commissioner Winter of the Australian Conciliation and Arbitration Commission granted progressive increases in the pay rates of adult female process workers employed under the Australian Metal Trades Award, so that from 1 January 1972 their rates would be equal to adult male rates.

In a decision handed down on 15 December 1972, the Full Bench of the Commission decided to enlarge the concept of 'equal pay for equal work' to that of 'equal pay for work of equal value,' i.e. award rates for all work should be considered without regard to the sex of the employee. The new principle is applied to all awards of the Commission. However, it was considered that the social and economic consequences of the decision would be wide-ranging and so under normal circumstances implementation would take place by three equal instalments

so that one-third of any increase was payable no later than 31 December 1973, half of the remainder by 30 September 1974 and the balance by 30 June 1975. Under principles established in 1969, equal pay was to be given for equal work and the decision was not intended to rescind those principles under which females could become entitled to equal pay earlier than they would under the December 1972 decision.

Subsequent to the decision there were instances of agreements guaranteeing full equal pay earlier than required by the decision. The most notable was the granting of equal pay to women in the Australian Public Service during 1973.

In the 1972 decision, the Commission rejected the claim that adult females be paid the same minimum wage as adult males because of the family considerations involved in male minimum wages. However, in the 1974 National Wage Case the Commission discarded the family component concept and decided to extend the male minimum wage to females in three stages, the rates for both males and females becoming equal from the beginning of the pay period in which 30 June 1975 occurred.

Following an amendment to the South Australian Industrial Conciliation and Arbitration Act, 1972-1974 in September 1975, the concept of a separate State living wage for both males and females was abolished. This, together with the simultaneous repeal of Section 78 of the Act relating to equal pay, eliminated discrimination between the sexes and removed an inhibiting factor on the State Industrial Comission making equal pay decisions.

A historical discussion on the relativities of male and female wage rates was included on pages 290-2 of the South Australian Year Book 1970.

## Award Wages

The minimum weekly amounts provided in awards, determinations, and registered agreements under Federal and State jurisdiction are known as award rates. The amounts shown in the following tables are a weighted average of minimum weekly wage rates payable to adult males and females in South Australia. Generally these are award rates; however, in a few cases where unregistered agreements are dominant in a particular industry, rates prescribed therein are used. The amounts shown should not be regarded as actual current averages, but rather as indexes expressed in money terms. The minimum rates used are for representative occupations within each industry, the weights for each occupation and industry being based on sample surveys conducted in 1954, with allowance made where necessary for subsequent changes in the industrial structure. Because of coverage difficulties rural industries are excluded. The statistics are designed to show movements in minimum wages as distinct from salaries, with the result that those awards, etc. which relate solely or mainly to salary earners have been excluded.

Classified as Federal are awards of, or agreements registered with, the Australian Conciliation and Arbitration Commission and the Coal Industry Tribunal, and determinations of the Australian Public Service Arbitrator. Incorporated under the State heading are awards or determinations of, or agreements registered with, State industrial tribunals, together with any unregistered agreements used in the computations.

In the next table weighted average minimum weekly wage rates for males and females are shown for individual industrial groups.

Weekly Wage Rates: Industrial Groups, South Australia (a)
At 31 December

Industrial Group	1971	1972	1973	1974	1975
			Dollars		
		. A	DULT MAI	LES	
Mining and quarrying	56.94	62.46	71.36	103-49	112.03
Manufacturing:					
Engineering, metal works, etc	58.14	63.57	71.28	101.55	110.71
Textiles, clothing and footwear	55.92	61.66	71.17	91.49	107.35
Food, drink and tobacco	55.66	61.85	72.27	98.34	110.46
Sawmilling, furniture, etc	57.67	61.39	75.06	99.88	107-12
Paper, printing, etc	65.32	72.49	81-11	108.84	118-95
All manufacturing groups	58.23	63.87	72.67	100.89	110-91
Building and construction	62.76	68.92	77-59	106.60	127-60
Railway services	55.19	62.91	71.38	100.27	107.38
Road and air transport	57-53	62.16	73.23	104.63	112.52
Shipping and stevedoring	64.06	78.94	87-96	112.56	138.76
Communication	77.05	86.18	101.96	129.73	140.52
Wholesale and retail trade	58.56	66.05	75.90	104-19	112.35
Public authority (n.e.i.) and com-					
munity and business services	56.83	62.03	74·16	97-23	111.07
Amusement, hotels, personal ser-					
vices, etc.	54.36	57-93	70-30	92·44	105-47
All industrial groups	59.38	65.82	75.20	103-32	115-11
Manufacturing:		An	ULT FEMA	LES	
Engineering, metal works, etc	45.57	53.30	61.80	92-19	99.00
Textiles, clothing and footwear	44.09	47·97	60.32	81.88	101.43
Food, drink and tobacco	40.45	45.98	57.56	89.51	99.07
Other manufacturing	42.75	49.10	60.67	87.21	100.56
All manufacturing groups	43.62	49.60	60.39	87.76	100.03
An manuacturing groups	43 02	49.00	00.35	87.70	100-03
Transport and communication	51.48	59.38	74.98	101.81	113.16
Wholesale and retail trade	44.58	51.68	62.56	96.24	106.22
Public authority (n.e.i.) and com-				•	
munity and business services	43.86	50.15	61.64	90.85	104.85
Amusement, hotels, personal ser-					
vices, etc.	40.81	45.26	59-90	84.94	98.65
All industrial groups	44.16	50.50	62.11	91.47	103-20
G					

<sup>(</sup>a) Weighted average minimum weekly rates payable for a full week's work (excluding overtime) as prescribed in awards, determinations and agreements. Excludes rural industries.

The following table shows weighted average minimum weekly wage rates for adult males and adult females with separate details shown for award rates within Federal and State jurisdictions. The index numbers refer to the weighted average minimum weekly wage rates of all awards.

# Weekly Wage Rates, South Australia(a)

		Rates o	of Wage			Numbers
31 December		deral ards		tate vards	(Base:	Froups Australia = 100)
	Adult Males	Adult Females	Adult Males	Adult Females	Adult Males	Adult Females
	\$	\$	\$	\$		
1971	60.29	45.84	57.34	43.01	210.3	221.8
1972	67-13	51-33	62.88	49.94	233-1	253.7
1973	76.21	63.67	73.00	61.03	266.3	312.0
1974	104.75	89.50	100.21	92.81	365.8	459.5
1975	117-56	103-51	109.04	102-99	407-6	518.4

<sup>(</sup>a) Weighted average of minimum weekly rates payable for a full week's work (excluding overtime) as prescribed in awards, determinations and agreements. Excludes rural industries.

#### Holiday Pay

On 7 June 1972 a Full Bench of the Arbitration Commission handed down a decision which has resulted in increases in annual recreation leave pay to a large number of Australian workers. The Bench ruled that over-award payments, shift work premiums, industry allowances and some other allowances should be included in holiday pay. General provisions only were introduced as each award was to be considered separately. Since September 1972, various awards have been altered to provide (in most cases) for a 17.5 per cent loading to be added to the payment which the employee would have received in respect of the ordinary time he would have worked had he not been on leave during the relevant period. Permanent and temporary officers of the South Australian Public Service (employed other than as seven day week workers) receive a 17.5 per cent leave loading subject to a maximum of \$150. In the Australian Public Service the leave loading is average weekly earnings for the September quarter before the accrual date.

# **EARNINGS**

Figures given in this section relate to actual average weekly earnings (including award wages, salaries, overtime earnings, over-award and bonus payments and prepayments) of all wage earners and salaried employees, whether adult or junior, full-time, part-time, or casual. Payments to members of the defence forces are excluded.

Particulars of wages and salaries are not available for males and females separately and average earnings have therefore been calculated by using total civilian employment expressed in terms of 'male units'. Male units represent total male employment plus a proportion of female employment based on the approximate ratio of female to male earnings.

# Average Weekly Earnings per Employed Male Unit, South Australia

	Year			September Quarter	December Quarter	March Quarter	June Quarter	Year
						Dollars		
1970-71		 	 	75.30	77:30	75.40	80.90	77:20
1971-72		 	 	83.70	87.20	82.00	88.20	85.30
1972-73		 	 	88.20	94.70	89.80	99.10	93.00
1973-74		 	 	103.70	110-90	106.60	121.90	110.60
974-75		 	 	131.00	143.80	137.60	146.00	140.70
1975-76				148.30	163.80	p155·50		

As quarterly figures are affected by seasonal influences, comparisons for trends should be made by relating complete years or corresponding quarters. Because of variation in coverage, etc. these figures cannot be related to the minimum weekly wage rates shown in the preceding section.

Separate estimates of the average weekly earnings of males and females, and of adults and juniors, shown in the next table, have been obtained from sample surveys conducted in the last pay-periods of October 1972, 1973 and 1974. The surveys were based on a sample selection of private employers subject to payroll tax and details of employees in non-government hospitals not subject to payroll tax, employees of Australian and State government departments, authorities and semi-government bodies and local government authorities. Employees in agriculture and domestic service were excluded as were those of religious, benevolent and similar organisations exempt from payroll tax.

# Average Weekly Earnings: Private and Government Employment South Australia (a)

	Ā	Adult Males				
October	Overtime	Ordinary Time	Total	Junior Males	Adult Females	Junior Females
			Dolla	ırs		
1972		82·10 96·70 126·90	91·60 109·10 138·80	47·30 56·00 74·50	64·30 77·40 107·60	39·90 47·20 68·40

<sup>(</sup>a) Full-time employees other than managerial, executive, professional and higher supervisory staff.

Similar surveys were also conducted in the last pay-periods of October for the years 1968 to 1971 but coverage in these years was restricted to private employers subject to payroll tax. Details of these earlier surveys were included on pages 344-5 of the South Australian Year Book 1974.

#### HOURS OF WORK

The 40-hour week is the standard working week for employees under Federal and State awards; however, the number of hours constituting a full week's work varies between occupations. Significant variations to this standard working week were achieved in the stevedoring industry during 1972 where a 70-hour fortnight has operated from June 1975. Certain Federal awards covering rural industries prescribe hours in excess of forty, while other occupations by tradition work less than forty hours, although forty hours is generally retained in their awards.

The weighted average standard hours (excluding overtime) prescribed in awards, determinations, and agreements for a full working week for adult male employees in all industries in South Australia, except rural, shipping, and stevedoring, was 39.95 hours at 30 June 1975. This compared with 43.83 hours at 30 September 1947 immediately before the introduction of the 40-hour week. The weighted average for female employees at 30 June 1975 was 39.77 hours. The weighted average figure for South Australian male employees has not changed significantly since 1953, nor for females since 1951. The normal working day in manual trades is of eight hours duration, and employees working beyond these hours are paid penalty rates.

The following table shows the relative distribution of employed civilian wage and salary earners in Australia according to the number of hours worked in a specified week, as recorded in the August Labour Force Surveys. The distribution is based on actual hours worked, including overtime, rather than hours paid for, and is therefore affected by public holidays, leave, absenteeism, temporary absence from work because of sickness, accident and industrial disputes, and work stoppages caused by plant breakdowns and weather.

Employed	Persons:	Hours	Worked.	Australia (a)

Au	gust	Proportion who Worked the Following Hours in the Specified Week							Total
	_	0	1-29	30-34	35-39	40	41-48	Over 49	
					Per	cent			
1971		4.4	10.2	4.1	11.3	42.3	11.8	15.9	100.0
1972		5.8	10.4	3.7	11.1	41.3	11.6	16.1	100.0
1973		5.8	11.3	3⋅8	10.8	39.8	12.4	16.1	100.0
1974		6.1	12.0	4.3	12.7	37.9	11.8	15.3	100.0
1975		6.4	12.6	4.6	12.8	38.7	10.7	14.2	100.0

<sup>(</sup>a) Employed civilian population, fifteen years of age and over.

#### HOLIDAYS AND LEAVE

## Public Holidays

A number of days are observed each year throughout the State as public holidays and additional days may be proclaimed either on a State-wide basis or applicable to particular localities. Employees required to work on public holidays

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normally receive an extra day's pay and are paid at penalty rates. From 1971 authorised public holidays are:

New Year's Day (1 January or the following Monday if that day falls on a Saturday or Sunday),

Australia Day (first Monday after 25 January),

Good Friday,

Easter Saturday,

Easter Monday,

Anzac Day (25 April or the following Monday if 25 falls on a Sunday),

Adelaide Cup Day (third Monday in May),

Oueen's Birthday (usually observed on a Monday early in June),

Labour Day (second Monday in October),

Christmas Day (25 December or the following Monday if 25 falls on a Saturday or Sunday), and

Proclamation Day (28 December or the following Monday if 28 falls on a Saturday or Sunday).

The Holidays Act makes provision for other days to be proclaimed in lieu of the authorised holidays. Additional holidays may also be proclaimed.

#### Annual Leave

Under Federal awards generally, four weeks annual recreation leave is granted to employees who have completed twelve months continuous service and there are provisions for a proportionate payment where employment is terminated before the completion of twelve months. Under State awards the Federal standard has generally been adopted.

Employees of the South Australian Public Service are entitled to four weeks annual recreation leave. However, with the exception of some employees engaged in essential services e.g., hospitals, motor vehicle registrations etc., State public servants are required to take three days of their recreation leave between the Christmas and New Year holidays. Australian public servants were granted four weeks annual recreation leave from 1 January 1973.

Certain employees in special occupations or where regular shift work is involved e.g. police officers, nurses, etc., are entitled to annual recreation leave in excess of four weeks.

In 1973 the South Australian Industrial Commission handed down a decision which will enable part-time workers, when taking annual leave, to be paid the normal weekly wage they would have received had they been at work.

#### Sick Leave

The Industrial Conciliation and Arbitration Act, 1972-1975 for South Australia provides that all full-time employees shall be eligible to receive annually not less than ten days cumulative sick leave on full pay. There is also provision for insertion in awards allowance for unlimited accumulation of such leave. Most Federal and State awards provide for two weeks sick leave a year.

#### Long Service Leave

In 1964 the Australian Conciliation and Arbitration Commission included, for the first time in a Federal award, long service leave, granting employees in the graphic arts and metal trades industries leave on the basis of thirteen weeks for twenty years service in respect of employment before the date of the decision, and eight and two-thirds weeks in respect of each ten years of subsequent service; these provisions have been extended to many other Federal awards. In a number of other cases, registered agreements provide for thirteen weeks leave after fifteen years service.

The South Australian Long Service Leave Act, 1967-1972 entitles employees, in respect of continuous service after 1 January 1972, to thirteen weeks leave for each ten years service. In respect of service before 1 January 1972 the entitlement is calculated at the rate of thirteen weeks for fifteen years service for the period 1 January 1966 to 31 December 1971 and at the rate of thirteen weeks for twenty years service for the employment period up to 31 December 1965. The obligation to grant leave is imposed on all employers in South Australia except in regard to employees entitled to long service leave pursuant to an award of the Australian Conciliation and Arbitration Commission. The Industrial Commission has the power to exempt an employer from the provisions of the Act where the employees involved have access to benefits not less favourable than those prescribed by the Act. Other provisions of the Act relate to payment for leave, deferment of leave, claim for leave on termination of employment, and notice of granting of leave.

State and local government employees are in general entitled to thirteen weeks leave after ten years service, and Australian Government employees to three months after ten years service. The long service leave provisions which apply to State public servants are also extended to teachers employed under the Education Act.

The various long service leave arrangements provide for additional pro rata periods of leave for service in excess of the minimum, and for pro rata payments for employees who have completed a specified term of service but who, through the termination of their services or through death, do not complete the full entitlement period.

#### Maternity and Paternity Leave

In 1966 the Public Service Act was amended to enable a permanent female employee of the Australian Public Service to absent herself from duty because of pregnancy for a period of twenty-six weeks at the time of confinement. The leave could be taken from sick leave, recreation leave or long service leave credits or as leave without pay. In 1973, new provisions were introduced which entitle female employees, whether permanent or temporary, to at least twelve weeks maternity leave on full pay and to a total period of absence of up to fifty-two weeks in respect of each confinement. Provisions for paternity leave were also introduced at this time. A male employee, permanent or temporary, can apply for paternity leave provided he is the father, or a person accepting responsibility for the care and maintenance of an expected or newly-born child. Leave not exceeding one week, may be granted in the period one week before the expected date of birth of the child to five weeks after the actual date of birth.

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Maternity leave provisions also exist for female officers of the South Australian Public Service. The maximum special leave without pay is twenty-six weeks but leave on full pay to which the officer has an entitlement may be used in addition to, or in substitution for the special leave. No paternity leave is available to male officers.

There are provisions in the Education Act for maternity leave for teachers in the South Australian Education Department with the maximum leave being fifty-eight weeks and the minimum fourteen weeks. Leave is taken without pay except when long service credits are used.

At present neither maternity nor paternity leave provisions exist for workers covered by State or Federal awards. However eight Industrial Agreements filed with the South Australian Industrial Commission do contain such provisions.

# 7.4 INDUSTRIAL SAFETY

#### SAFETY REGULATIONS AND INSPECTION

On the recommendation of the Parliamentary Select Committee on Occupational Safety, Health and Welfare in Industry and Commerce, a new Act, the Industrial Safety, Health and Welfare Act, was passed in 1972. This Act replaced those sections of the Industrial Code, 1967-1972 that dealt with the safety, health and welfare of persons employed in factories, shops, offices and warehouses and the Construction Safety Act, 1967 with respect to persons employed on building and construction sites.

Only general principles applicable to all employed persons in industry (primary as well as secondary), commerce and in State Government are contained in the Industrial Safety, Health and Welfare Act. It authorises the making of detailed provisions by regulations for different industries and different processes. The Act is progressively coming into operation for different industries as regulations are prepared. The Construction Safety Regulations, 1974 were the first to be prepared and apply to persons employed on building and construction sites. They came into force on 1 April 1974 and revoked all regulations made under the Construction Safety Act, 1967. The Rural Industries (Machine Safety) Regulations, 1975 and the Power Driven Machinery (Safety) Regulations, 1975 came into effect on 1 January 1975. The Industrial Safety Code Regulations came into effect on 1 September 1975.

At present most of the legislation directed at industrial safety is administered by the Department of Labour and Industry, although other authorities hold responsibilities in certain fields.

# Department of Labour and Industry

The general working conditions in industrial premises (factories, shops, offices and warehouses) are regulated by the Industrial Safety Code Regulations 1975, and the Shops and Offices Regulations, 1975. Inspections are made by Departmental officers to ensure that the requirements of the Safety Regulations with respect to safeguarding of machinery, safety of processes, cleanliness and general working conditions on industrial premises are being observed.

The registration and inspection of steam boilers and other pressure vessels is provided for under the Boilers and Pressure Vessels Act, 1968-1971. The Lifts and Cranes Act, 1960-1972 regulates the use of lifts, escalators, cranes and hoists, and requires the Department to approve new installations and to inspect regularly existing lift equipment. The Inflammable Liquids Act, 1961-1974, and the Liquified Petroleum Gas Act, 1960-1973, regulate the storage and carriage of these products.

# Department of Mines

Regulations under the Mines and Works Inspection Act, 1920-1970 provide for the health and safety of persons engaged in mining, quarrying or associated treatment plants and for the protection of the general public. Mining sites and camps must be maintained in safe condition with specific attention given to ventilation, sanitation, the use of explosives and the protection of the area amenity and environment.

Officers of the Department inspect mines and quarries; ensure there is no undue impairment of the environment; check old workings; investigate mining accidents and complaints associated with mining activities; and give advice to industry on matters pertaining to mining and explosives.

# Department of Public Health

Health aspects of industrial safety are the responsibility of the Occupational Health Branch of the Department of Public Health. The Department investigates health hazards resulting from the presence of toxic and noxious substances in industry, both on its own initiative and on reference from employers, unions, other authorities, and individuals. Investigations are carried out where radio-active and irradiating apparatus is in use for industrial, scientific, or medical purposes.

#### Chemistry Department

The Explosives Act, 1936-1974 regulates the importation, manufacture, carriage, storage, and sale of explosives. The Chemistry Department is responsible for the maintenance of government magazines and the licensing and inspection of private magazines. Vehicles used in the carriage of explosives are also licensed. Commercial explosives entering the State are inspected by the Department.

## Electricity Trust of South Australia

Consumers' electrical installations are required to conform to the service rules of the Electricity Trust and the wiring rules of the Standards Association of Australia, and are subject to inspection by Trust officers. Persons engaged in the installation, maintenance or repair of electrical installations and permanently connected equipment must be licensed to do this work in accordance with the provisions of the Electrical Workers and Contractors Licensing Act, 1965-1966. Under the Electrical Articles and Materials Act, 1940-1967 certain classes of electrical articles and materials may only be sold or hired or offered for sale or hire if they are of a type approved by the Trust or a recognised interstate authority.

#### WORKMEN'S COMPENSATION

## Legislation

Provisions describing assistance for workmen sustaining personal injury out of or in the course of their employment are included in the Workmen's Compensation Act, 1971-1974. The provisions of the Act extend to injuries arising out of or in the course of employment and cover accidents during recess periods, travelling to or from work, travelling to or from or while in attendance at a place of pick up, travelling to or from or attending a trade or technical school, and travelling for medical treatment while on compensation.

An injury may be physical or mental. It includes diseases contracted and the aggravation or recurrence of an injury or disease including any pre-existing coronary heart disease.

Compensation is payable when the injury results in death, or in total or partial, permanent or temporary incapacity. Where death results from the injury, the Act provides for payment to members of the family wholly or partly dependent on the earnings of the deceased. In such a case, compensation will be an amount equal to the sum of the workman's earnings in the six years before the accident plus \$500 for each dependent child, with a maximum of \$25 000. If the workman has not been in the same employment for six years the amount will be his average weekly earnings in the job at which he was working at the time of the accident multiplied by 312, with a maximum of \$25 000. Where a workman dies leaving no dependants, compensation will be paid into the estate covering medical, funeral and other expenses with a maximum of \$500.

Where the injury does not result in death, the most common form of compensation is weekly payment. If incapacity is for one week or more compensation is an amount equal to average weekly earnings during the twelve months preceding the incapacity. The maximum liability of an employer is \$18 000, unless the workman is totally and permanently incapacitated, when it is \$25 000 or such greater amount as may be fixed by the Court having regard to the special circumstances of the case. Weekly payments must begin within two weeks of the workman providing the employer with a medical certificate and his declaration in the correct form stating that he believes himself entitled to compensation. The payment must be made to the workman on his usual pay day.

Provision is made for lump sum payments in lieu of weekly payments. Such payments are arranged by agreement; or after six months, by proceedings in the Industrial Court of South Australia on application of either employer or employee. Lump sum payments are payable for certain specified injuries e.g. loss of limbs, for permanent injuries which may involve total or partial incapacity for work whether actual or potential e.g. speech loss, or no incapacity for work e.g. severe facial scarring.

In addition to other compensation reasonable medical, hospital, nursing, constant attendance, rehabilitation and ambulance expenses are paid and compensation is provided to \$150 for loss or damage to clothing and personal effects and \$300 for loss or damage to tools of trade.

Excluded from the scope of the Act are members of the crews of fishing vessels remunerated by a share in the profits or the gross earnings of the working of such vessels, service personnel and Australian Government employees. Compensation for employees of the Australian Government is provided by the Compensation (Commonwealth Employees) Act 1971-1974.

## Workmen's Compensation Insurance

The Workmen's Compensation Act requires every employer, unless specifically exempted, to obtain from a licensed insurance company a policy which fully covers his liability under the Act. The exemptions are the State Government which provides its own cover through the State Government Insurance Fund, the South Australian Railways Commissioner, and any employer who can satisfy the Minister of Labour and Industry of his ability to meet all probable claims and who is accordingly issued with a certificate of exemption.

The following table shows the number of effective claims lodged with, and total compensation payments made by, insurance companies and self insurers during each of the last five years. Payments shown against any year will include some payments arising from claims lodged in earlier years.

# Workmen's Compensation Claims, South Australiap

Year	No. of Claims Lodged	Payments Made
	'000	\$ million
970-71	. 57	7.7
971-72	61	10.6
972-73	75	15.4
973-74	87	21.3
974-75	84	36.2

PART 8

# PHYSICAL DEVELOPMENT

# 8.1 WATER SUPPLY AND SEWERAGE

## WATER SUPPLY

With 96 per cent of the State receiving less than 500 millimetres of rain a year, and high evaporation increasing the demand for water and causing heavy losses from reservoirs, water conservation is of vital importance to South Australia.

The Waterworks Act, 1932-1975 gives the Minister of Works power to divert and impound the water from any streams or springs and take the water found in or under any lands for the purpose of constructing, completing, extending or maintaining any waterworks or for supplying water to or in any water district. The Act also gives the Minister power to declare any district, place or town a water district. The function of exploiting water resources is performed through the Engineering and Water Supply Department.

The Control of Waters Act, 1919-1975 provides that any stream in the State may be brought within the Act by proclamation. This Act has only been applied to the River Murray, making water available to riparian users through annual licence.

The Underground Waters Preservation Act, 1969-1975 provides for strict control within certain areas which may be defined by the Government. In such areas the owners must record full details of all wells with the Engineering and Water Supply Department and must have a permit to alter a well or sink others. Underground water usage can also be regulated. Further details concerning underground water appear on pages 25-7.

The Water Conservation Act, 1936-1972 provides for the control of small reservoirs, bores, tanks etc. established in remote areas as emergency water supplies or to assist local development.

The following table gives details of water supplies in South Australia at 30 June for the five years to 1975.

At 30 June		Area of Works	Storage Capacity (a)	Length of Mains			
		km²	Megalitres	km			
971		65 138	228 530	19 360			
972		65 198	228 630	20 050			
973		68 945	230 000	20 490			
974		69 005	230 030	20 946			
1975	• • • •	68 973	228 740	21 278			

Water Supplies, South Australia(a)

## DISTRIBUTION OF WATER RESOURCES

# **Drainage Systems**

In agreement with the States, the Australian Water Resources Council has divided Australia into twelve surface water drainage divisions. The divisions which constitute major surface water resources for South Australia are the South Australian Gulf Drainage Division which lies wholly within the State and in which are located all important State reservoirs, and the Murray-Darling Division, of which only a part is located in South Australia, and the waters of which are allocated between this State, Victoria and New South Wales in accordance with the terms of the River Murray Waters Agreement (see pages 371-2).

Part of the large Lake Eyre Drainage Division covers the northern and eastern areas of the State, but, although streams in the area may flood extensively on occasions, they are generally unreliable and significant only to the local pastoral industry. The section of the South-East Coast Drainage Division which intrudes into the south-east corner of South Australia has no good dam sites but a high rainfall in the area provides a good underground water resource of considerable importance to the State. Underground resources on the seaward edge of the Western Plateau Division, which cover the south-western part of the State are recharged also from local rainfall.

## South Australian Gulf Drainage Division

The eastern boundary of this Division is formed partly by the Mount Lofty Ranges which rise to a maximum of 727 metres east of Adelaide and to over 1000 metres north of Burra and further north it follows the Flinders Ranges which reach a height of 1166 metres at St Mary Peak. The boundary then rounds Lake Torrens and, further south, the western boundary is formed by a

<sup>(</sup>a) Includes pipeline storage tanks and service reservoirs on distribution systems.

discontinuous line of hills on Eyre Peninsula. Kangaroo Island is also included, so that, in all, the Division covers the whole perimeter of the South Australian gulfs. The individual river basins in this Division are all very small.

Rainfall in excess of 750 millimetres a year occurs only on a very small area in the Mount Lofty Ranges, while in the north-west of the Division the annual average is less than 150 millimetres. In the southern parts of the Division, average precipitation generally exceeds potential evaporation only from May to August, and over most of the Division monthly evaporation rates exceed rainfall throughout the year.

The average annual run-off in this Division at the lowest practical dam sites is estimated at 430 000 megalitres but is subject to considerable variation. The two best streams, the Onkaparinga and the Torrens, account for 135 000 megalitres of the average flow and the combined annual flow of these two has varied between 467 000 megalitres down to 8 600 megalitres in the last eighty years.

After the major dam sites in the Mount Lofty Ranges had been developed because of the small size of the individual catchments in the Division, and the relatively low run-off and its high variability, it was found more economical to provide additional water to Adelaide and other high demand centres via pipelines from the River Murray. However, as demand continues to rise and problems with the quality of the River Murray water increase, attention is being re-directed to further development of streams within the Division.

The present average annual extraction of water by the Engineering and Water Supply Department from the Gulf Drainage Division is about 120 000 megalitres; private diversion may take a further 13 000 megalitres.

Most of the South Australian reservoirs are situated in this Division as can be seen from the map on page 366. The following table shows the capacity, area at full supply level and the catchment area of the ten largest reservoirs at 30 June 1975.

Major	Reservoirs,	South	Australia(a)
	A # 30 Ti	me 10	75

Reservoir	Capacity	Area at Full Supply Level	Catchment Area	
	Megalitres	Hectares	km²	
South Para	51 300	444	228	
Mount Bold	47 300	308	388	
Myponga	26 800	280	124	
Kangaroo Creek	24 400	129	289	
Millbrook	16 500	178	233	
Happy Valley	12 700	188	451	
Tod River	11 300	134	196	
Bundaleer	6 370	. 85	1 671	
Baroota	6 140	63	136	
Warren	5 080	105	119	

<sup>(</sup>a) All reservoirs with a capacity in excess of 5 000 megalitres.

#### River Murray

The River Murray is the most important source of water supply for South Australia. Under the terms of the River Murray Waters Agreement (see pages 371-2), South Australia is entitled to 1 546 810 megalitres of water annually and, after Dartmouth Reservoir has been completed and declared to be effective, this entitlement will be increased to 1 850 250 megalitres, subject to the declaration of restriction by the River Murray Commission. Most of this water is used for irrigation purposes but more than 120 000 megalitres is used for water supply. The completion of present works will provide pipelines with a capacity capable of meeting a demand of 400 000 megalitres annually.

Adelaide metropolitan water supplies are supplemented by River Murray water through the Mannum-Adelaide and Murray Bridge-Onkaparinga pipelines. The Morgan-Whyalla, Swan Reach-Stockwell and Tailem Bend-Keith pipelines provide the water supply for extensive country areas or augment local resources in these areas. The first water pumped through the Mannum-Adelaide pipeline reached the metropolitan system in 1954. The water is drawn from the River at Mannum nearly 67 kilometres in a direct line from Adelaide, and is raised by three pumping stations a total of 457 metres to a 137 megalitre summit storage near Tungkillo. At first the water flowed into the Torrens and Onkaparinga Rivers and hence into the metropolitan system; later the pipeline was extended to a terminal storage near Modbury. The Mannum-Adelaide pipeline is also connected to the Warren Reservoir on the South Para River and branches serve many country areas en route.

A second large pipeline to augment the metropolitan supply was completed in 1973. The pipeline extends for 48 kilometres from the River Murray near Murray Bridge to the River Onkaparinga near Hahndorf, and the water is distributed through the reservoirs on the latter stream. Three pumping stations lift the water 418 metres over the first 40 kilometres of the pipeline to a summit storage from which an 8-kilometre gravity section of the line discharges into the Onkaparinga. A branch main supplies the town of Murray Bridge and other branch mains supply areas in the Mount Lofty Ranges. This pipeline will be the source of supply for the new town of Monarto.

The Morgan-Whyalla pipeline, completed in 1944, includes four pumping stations which lift the water 478 metres over a distance of 92 kilometres from Morgan to a summit storage at Hanson. From here the water gravitates 267 kilometres via Port Augusta to Whyalla. Branch lines have been laid to Woomera (177 kilometres) and other country centres. The Morgan-Whyalla pipeline, being an additional source of supply for the Bundaleer system, has permitted reticulation over most of Yorke Peninsula. A second main was completed in 1966 and appurtenant works comprising additional storages and four new pumping stations were commissioned early in 1970. The second main which more than doubles the capacity of the scheme, parallels the original main to Baroota Reservoir, then extends westerly to Whyalla via a 12-kilometre undersea crossing of Spencer Gulf.

A 53-kilometre pipeline between Swan Reach and Stockwell which connects to the distribution section served by Warren Reservoir commenced operating in 1969 to supplement the supplies for lower northern areas from the Murray. A 143-kilometre pipeline between Tailem Bend and Keith completed in 1969 forms the backbone of a scheme involving 800 kilometres of branch mains

subsequently laid to supply River Murray water to towns and farmlands in the Upper South East. The River Murray also supplies towns along its banks by means of direct pumping.

## Other Water Resources

## Eyre Peninsula

Eyre Peninsula has no perennially flowing streams with the Tod River the only stream that can be relied upon in normal years to provide some flow of water. Underground basins, mainly in the southern portion of Eyre Peninsula provide most of the water supplies. Port Lincoln is supplied entirely with underground water available at shallow depth in the Lincoln Basin and Uley South Basin. The Uley Wanilla Basin supplies Cleve and Cowell via the East Coast Main and also supplements the natural intake of the Tod Reservoir which was built in 1922 on a tributary of the Tod River.

A trunk main, 384 kilometres in length, from the Tod Reservoir to Ceduna and Thevenard was laid between 1923 and 1926 and a program of replacement and enlargement was completed in 1974. A 106-kilometre trunk main from Lock on the Tod Trunk Main supplies water to Kimba and intervening farmlands. This supply is augmented with water from the Polda underground basin. All above-ground sources of water on Eyre Peninsula are being fully utilised and any further supplies will have to come from underground sources.

#### South East

The hydrology of the South East covers a complex of surface and underground waters with substantial water resources but to date most work has been concentrated on the removal of water by drainage and this is discussed on pages 372-3.

Eight Mile Creek to the east of Port MacDonnell carries a permanent natural overflow from the springs of the Ewen Ponds area and discharges 60 000 megalitres a year into the Southern Ocean and there are other visible outlets. The Blue Lake now provides 4 000 megalitres annually to Mount Gambier. There is scope for considerable development in the South East and it is likely that 120 000 megalitres could be used annually from the underground water resources of the Region.

#### Other Underground Supplies

Many other areas of the State are dependent on underground supplies, particularly for stock drinking water. The aquifers of the North Adelaide Plains provide the major source of water for market gardens and related irrigation, but the demand level of 21 000 megalitres has been found to be beyond the permanent capability of the area. Usage is subject to Government control, and investigations on means of prolonging the life of the aquifers are in progress. A more complete discussion on underground water appears on pages 25-7.

#### Water Consumption

The following table gives details of water used during the year and storage capacity of major reservoirs at the end of the year for metropolitan and country districts for the years 1971-72 to 1974-75. The quantity of water pumped from the River Murray through the major pipelines is also shown.

# Water Storage and Consumption, South Australia

Particulars	1971-72	1972-73	1973-74	1974-75
Capacity of major storages (at end of		Mega	litres	
year): Adelaide metropolitan water supply (a) Country water supply	188 380	188 380	188 680	188 680
	36 150	36 150	36 150	34 860
Water consumption: Adelaide metropolitan water supply (b) Country water supply (c)	142 800	155 300	144 700	156 900
	66 000	74 100	67 700	76 400
Pumped from River Murray: Mannum-Adelaide pipeline Murray Bridge-Onkaparinga pipeline Morgan-Whyalla pipeline Other supply systems	9 600	51 600	22 200	19 300
	—		7 500	3 700
	19 900	29 000	21 400	21 500
	9 300	15 500	10 700	10 900

<sup>(</sup>a) Includes storages on the Mannum-Adelaide and Murray Bridge-Onkaparinga pipelines.

# Metropolitan Water Supply

In the following table, details of metropolitan services as well as revenue and expenditure are given for the metropolitan water supply district for the years 1971-72 to 1974-75.

Adelaide Metropolitan Waterworks, South Australia

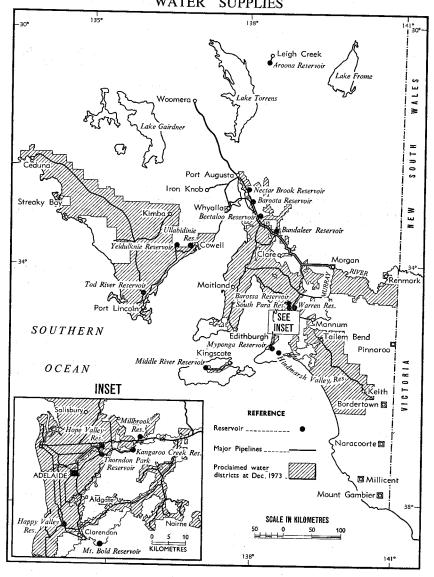
Particulars (a)	1971-72	1972-73	1973-74	1974-75
Length of mains (kilometres)	6 559	6 646	6 867	6 874
	264 222	272 001	278 624	285 125
		\$'0	00	
Revenue: Rates and excess water Other	15 618	18 761	20 486	22 072
	154	154	213	260
Total	15 773	18 915	20 699	22 332
Expenditure: Working expenses	7 130	8 516	10 121	13 118
	6 414	6 738	7 543	8 996
Total	13 544	15 254	17 664	22 114
	2 229	3 661	3 035	218

<sup>(</sup>a) Includes particulars relating to near country areas supplied by extensions of the Metropolitan distributions system.

<sup>(</sup>b) Consumption within the Adelaide Statistical Division.

<sup>(</sup>c) Includes consumption in various areas outside of the Adelaide Statistical Division supplied from the Metropolitan distribution system.

# PORTION OF SOUTH AUSTRALIA WATER SUPPLIES



#### WATER RATES AND CHARGES

Water rates are levied on all properties served from or abutting a water main except where specific exemption from rating applies or the property is in an area not subject to rating.

Amounts payable by individual ratepayers are determined by a base water rate on the annual or unimproved property value and a water rate per kilolitre. Payment of the base rate on property permits use of a water allowance which is determined by dividing the sum involved by the water rate per kilolitre. Water used in excess of the allowance is charged at the rate per kilolitre.

Valuation equalisation was introduced in Metropolitan and Country Water Districts from 1 July 1975. This system provides for a more even distribution of rates and properties of equal market value pay approximately the same base water rates irrespective of location or year of valuation. The approximate base water rate on a home with a market value of \$30 000 is \$76.50. A minimum charge of \$20 is applicable.

In Country Lands Water District (farm lands) the current base water rate is 25 cents for each hectare located within 1.6 kilometres of a main. A minimum charge of \$20 is applicable.

The current water rate per kilolitre applicable in City, Township and Country Lands Water Districts is 14 cents per kilolitre. Where water is supplied to properties outside of proclaimed water districts or otherwise beyond ratable limits it is supplied by measure at the ruling rate per kilolitre.

Approved churches, charitable institutions and schools are exempted from payment of water rates on annual values and water is supplied to them by measure at concessional prices. A remission of up to 60 per cent of water rates, with a maximum of \$50 a year, is provided to eligible pensioners.

Services from mains to property boundaries are installed and maintained by the Engineering and Water Supply Department. Connection fees are uniform throughout the State and are currently \$50 for a 20 millimetre service and \$60 for a 25 millimetre service with commensurately higher fees for larger services.

#### SEWERAGE

## **ADMINISTRATION**

Sewerage of cities and towns in South Australia is undertaken by the State Government under the authority of the Sewerage Act, 1929-1975. The Act is administered by the Engineering and Water Supply Department for the Minister of Works and provides for waterborne sanitary sewerage schemes within proclaimed drainage areas. As a general rule the Government sewerage schemes are provided only in densely populated cities and towns where they are essential for public health reasons or in areas where it is necessary to protect surface or underground water resources from pollution by domestic or industrial wastes.

Local Government authorities are empowered under the Local Government Act, 1934-1975 to provide sanitary drainage schemes and in recent years a number of these authorities have installed common septic tank effluent drainage schemes discharging to biological filters or oxidation ponds.

#### METROPOLITAN SEWERAGE

Sewerage for Adelaide was first authorised by an Act of Parliament in 1878. Construction began in 1879 and by 1881 sewage from the city and inner suburbs was admitted to a sewage farm at Islington. Since then continual expansion of sewerage systems has kept pace with development of the metropolitan area as far as physical and financial factors permit and Adelaide is now the most completely sewered of the Australian capital cities.

The next table shows details of metropolitan sewers for the last four years.

# Metropolitan Sewers, South Australia

Particulars	1971-72	1972-73	1973-74	1974-75
Adelaide Drainage Area (km²)	544	550	642	652
Length of sewers (km)	3 888	4 060	4 193	4 400
Number of connections	265 755	276 652	288 166	297 300
Revenue:		\$'00	00	
Rates	11 837	12 798	14 159	15 914
Other	139	161	166	223
Total Expenditure:	11 976	12 959	14 325	16 137
Working expenses	4 909	5 463	6 950	9 751
Interest	4 500	4 900	5 328	5 963
Total	9 409	10 363	12 278	15 714
Surplus	2 567	2 596	2 047	423

The proclaimed Adelaide Drainage Area at 30 June 1975 served an estimated population of 865 000 persons and covered 652 square kilometres of the Adelaide Plains between Darlington and Elizabeth, segments of development around Christies Beach and the Blackwood-Belair area. Subdivision developers are required to make capital contributions towards the cost of sewer and water extensions for all new allotments in areas capable of being served within the Drainage Area.

Four major sewerage systems are employed, each draining to separate sewage treatment works at Bolivar, Glenelg, Port Adelaide and Christies Beach. Islington Sewage Farm was abandoned in 1966 when the Bolivar Treatment Works was put into service. The Christies Beach Treatment Works began operating in August 1971, and will eventually serve the whole of the area between O'Halloran Hill and Moana Beach. At present there are a number of small temporary treatment works installed in the Reynella-Morphett Vale area which will be phased out following connection of the developed areas to the Christies Beach Works. A limited scheme was constructed at Stirling in 1973.

A large number of common effluent drainage systems have been installed in fringe areas by local government authorities and most of these have been, or are planned to be, connected to the sewerage systems. A charge for each house connected is levied against local government authorities whose common effluent drainage systems discharge to sewer mains. Property owners pay an annual rate for the service to the local government authority concerned.

## COUNTRY SEWERAGE

At 30 June 1975 the drainage areas of country sewerage schemes constructed and operated by the Engineering and Water Supply Department totalled 105 square kilometres; the length of sewers laid was 616 kilometres and the number of connections totalled 24 939. Loan Funds invested to this date amounted to \$26 823 000.

Sewerage schemes are located at Angaston, Gawler, Gumeracha, Lobethal, Mannum, Millicent, Mount Gambier, Murray Bridge, Myponga, Naracoorte, Port Lincoln, Port Pirie, Victor Harbor and Whyalla.

Construction of the Port Pirie, Gawler and Victor Harbor sewerage systems is still in progress. In 1974-75, 47 kilometres of sewers and 2 081 new connections were laid in country drainage areas. In addition, the Engineering and Water Supply Department has constructed schemes at Mount Burr and Nangwarry townships for the Woods and Forests Department and numerous schemes to serve country hospitals, institutions etc. operated by other authorities.

Common effluent drainage schemes have been installed by local government authorities at Barmera, Pinnaroo, Maitland, Berri, Waikerie, Renmark, Streaky Bay, Nuriootpa, Kapunda, Eudunda, Cleve, Bordertown, Port Elliot, Lock, Mount Pleasant, Clare, Woodside, Saddleworth, Mount Barker, Riverton, Cummins, Parndana, Port Augusta, McLaren Vale, Meningie, Tanunda, Willunga, Paringa, Birdwood and portion of Port Wakefield. Since the main installations in some townships, extensions to the systems have been made. In addition to local authorities installing township schemes, the South Australian Housing Trust have provided Housing Trust home areas with small schemes. These have been installed at Wallaroo, Loxton, Quorn, Echunga and Kingscote. The Australian National Railways have provided schemes for settlements in the areas of Stirling North, Hesso and Pimba.

Construction of systems is currently being carried out at Ardrossan, Lameroo, Loxton, Penola, and extensions at Mount Barker, Berri and Tea Tree Gully. Surveys and designs are in progress for Goolwa, Williamstown, Kadina and Lyndoch and tenders have been let for schemes to be installed at Penola, Lameroo and Loxton.

Various other small schemes have been installed and include the Wilpena Pound chalet and camping area and aboriginal reserves at Ernabella, Point Pearce, Nepabunna, Amata and Point McLeay.

## SEWER RATES AND CHARGES

The Engineering and Water Supply Department provides sewer connections to property boundaries but internal drainage systems which are the responsibility of landholders must conform to regulations under the Sewerage Act and must be installed by authorised plumbers. Standard fees for sewer connections are \$50 and \$75 for 75-millimetre and 100-millimetre sizes respectively.

Sewer rates are levied on properties connected to or abutting a sewer, with a minimum annual charge of \$20. Valuation equalisation, as applicable to water rating, applies also to sewer rating. A marginally higher rate is charged in country areas. The approximate rate payable on a property with a market value of \$30 000 would be \$72 in the metropolitan area and \$82.50 in the country. A remission of up to 60 per cent of sewer rates to a maximum of \$50 is provided to eligible pensioners.

Rates levied by local government authorities on properties connected to common effluent schemes are usually proportionate to the costs and interest charges involved in the schemes.

#### WATER AND WATER POLLUTION CONTROL LABORATORIES

The Engineering and Water Supply Department has the responsibility to control pollution of the State's water resources, to maintain public water supplies at an acceptable quality and to operate sewerage systems. For this purpose, the Department maintains Water and Water Pollution Control Laboratories at Bolivar, where a staff of chemists, biologists and other scientists and technical personnel examine over 60 000 samples of water, effluent and industrial wastes each year. A more detailed discussion on these laboratories was included on pages 369-71 of the South Australian Year Book 1975.

# 8.2 IRRIGATION AND DRAINAGE

#### IRRIGATION

The development of irrigation areas in South Australia has been carried out by both Government authorities and private interests. Since 1930 the administrative authority for Government irrigation areas has been the Department of Lands with the Engineering and Water Supply Department the constructing authority for the Minister of Irrigation. A more detailed historical discussion of irrigation in South Australia was included on pages 314-6 of the South Australian Year Book 1970.

Irrigation areas are confined almost exclusively to the Murray Valley and can be classified into two groups; highland areas requiring the pumping of water, and reclaimed lands watered by gravitation. During 1974-75, 337 727 megalitres of water were diverted from the River Murray in South Australia for irrigation purposes. Details of the production of these areas are given in Part 9.1.

#### Highland Areas

With the major exception of the Mypolonga Irrigation Area, highland irrigation is located in the hot and dry zone along the River Murray between Morgan and the Victorian border.

These areas are largely devoted to vineyards and citrus and stone fruit orchards which are irrigated by water pumped from the river in open concrete-lined channels or pipes. Many of the recently developed areas use a system of overhead or under-tree sprays for watering the blocks in preference to the traditional surface reticulation. Sprays are also being used to develop land too high for reticulated watering. Landholders on Government controlled areas and on private lands constituted under special Parliamentary Acts pay an annual rate for routine irrigation and a charge is made for additional water, except at Loxton and Cooltong where water is supplied on a measurement basis.

Irrigation systems must also provide for the removal of surplus water which accumulates beneath the surface of the land. Blocks have internal drainage systems either leading to shafts and bores or to comprehensive drainage systems which convey the water to evaporation basins.

#### Reclaimed Areas

On the lower Murray between Mannum and Wellington, a series of swamp and overflow areas have been reclaimed by Government and private agencies.

Although these reclaimed areas contain some market gardens they are devoted principally to the growing of green fodder for dairy herds and sheep flocks. These lands are watered by gravitation and surplus water is run into main drains from which it is pumped back into the river. Approximately 600 hectares of highlands adjacent to reclaimed areas have also been developed for the production of fodder crops through the use of spray irrigation and there are 253 hectares at Mypolonga used for horticultural crops.

# Irrigation Areas, South Australia

Area Irrigated	1971-72	1972-73	1973-74	1974-75
Government controlled:		Hect	ares	
War Service schemes (1939-45 War) Other		3 178 12 712		3 236 12 722
Non-government:  Trusts, boards and association areas Private schemes			7 875 18 875	8 000 18 875

Further details of the 15 958 hectares irrigated in Government-controlled schemes in the year 1974-75 are shown in the following table.

## Government Controlled Irrigation Areas: South Australia, 1974-75

Area Irrigated	Highlan	d Areas	Reclaimed	Total
Area imgaled	Surface Reticulation	Spray Irrigation	Areas	Total
	 	Hectai	es	
War Service schemes (1939-45 W. Other		1 770 1 627	3 557	3 236 12 722
Total	 9 004	3 397	3 557	15 958

## THE RIVER MURRAY AGREEMENT

The River Murray Waters Act 1915 ratified an agreement between the Australian Government and the States of New South Wales, Victoria and South Australia. The River Murray Agreement provides that the minimum quantity of water to be allowed to be passed for supply to South Australia in each year shall be sufficient to maintain certain specified monthly flows in the lower river. The flow at Albury is shared equally by New South Wales and Victoria, and each of

these States has full control of its tributaries below Albury, subject in each case to the fulfilment of the South Australian allocation.

Works, to regulate the flow and control of the level of the River Murray, have included the construction of a number of storage areas and the erection of a series of locks and weirs. By 1928 Lake Victoria, in New South Wales adjacent to the South Australian border, had been converted into a large storage area supplying water for the South Australian irrigation settlements. Between 1922 and 1930 six locks and weirs were erected between Blanchetown and the Victorian border. In addition, five barrages were placed at the Murray mouth to prevent the ingress of salt water from the sea and to maintain a higher level in the River for the use of the reclaimed areas. These barrages were completed in 1940.

The major storage area, the Hume Reservoir above Albury, was completed in 1936. Further works, the last being completed in 1961, have doubled the original capacity to more than 3 million megalitres. Except for that held in various lock pools, no water from the Murray is stored in South Australia. In 1962 agreement was reached for the construction of a reservoir of over 6 million megalitres covering 1 300 square kilometres with its dam at Chowilla, just inside the State border, but early in 1969 the River Murray Commission recommended that an alternative dam be built at Dartmouth in Victoria before further consideration be given to the completion of the Chowilla dam. Legislation ratifying an agreement based on the Commission's recommendation was passed by the Australian, New South Wales and Victorian Parliaments in 1970 and an Act ratifying the agreement was passed in the South Australian Parliament in August 1971. In June 1974 the River Murray Commission accepted a tender for the construction of the Dartmouth Dam and appurtenant works and at present construction work is proceeding.

#### DRAINAGE

With the exception of the reclaimed areas along the lower Murray, already discussed in the previous section, and certain works associated with metropolitan development, drainage schemes in South Australia are confined to the south-east corner of the State. The topography of this area reveals a series of fertile valleys or flats interspersed by low infertile ranges running parallel to the sea and thus preventing the natural drainage of the land. In consequence considerable sums of money have been expended in constructing drainage schemes to reclaim these areas.

The first major drainage scheme was commenced in 1863 and completed in 1885. This scheme, the Millicent Drainage System, reclaimed 40 000 hectares of land at a cost of \$300 000, this cost subsequently being included in the land allotment price. The system is maintained by the Millicent and Tantanoola District Councils from rates levied on landholders.

Following this early success the Government undertook the construction of further drains during the next sixty years. These drains were constructed under three sets of conditions: *National Drains* were constructed at Government expense, the cost being absorbed in the price of the land when sold; *Petition Drains* were constructed on requests from landholders who agreed to repay the full cost to the Government over a period of forty-two years; *Scheme Act Drains*,

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commenced in 1908, provided for the Government and the landholders to share the cost, the landholders share being repayable over forty-two years. After the Scheme Act Drains had been completed it was found that the cost exceeded the benefit derived, and subsequently, following a royal commission, the landholders' liability was reduced.

The passing of the South-Eastern Drainage Act Amendment Act, 1948 marked a new stage in the development of south-eastern drainage. Previously attention had been devoted to the construction of a system of drains removing large quantities of water from general areas and providing above all for the rapid removal of floodwaters. By 1948, 700 kilometres of drains had been constructed at a capital cost of \$1 441 752. However, in 1948, with the establishment of the Western Division Drainage Scheme, emphasis was placed on a complete drainage program as achieved by the earlier Millicent scheme. The Western Division Drainage Scheme, which aimed at the comprehensive drainage of 160 000 hectares of land between the Millicent and Kingston districts, has now been completed. In 1960 the Eastern Division Drainage Scheme, for the drainage of 300 000 hectares of flats lying between Kalangadoo and 65 kilometres north of Lucindale, was commenced and construction on this scheme was completed in November 1969.

Under the schemes introduced since 1948 landholders were required to repay an amount based on a 'betterment assessment' of their property. As in the other schemes this amount was repayable over forty-two years. The 1971 amendment to the South-Eastern Drainage Act extinguished the liability of landholders to make a capital contribution in respect to existing drainage construction.

At 30 June 1975 approximately 1 450 kilometres of drains (excluding the Millicent scheme) had been constructed at a capital cost of \$18 756 000. These drains vary considerably in size from only a few metres to over 60 metres bottom width,

In addition to new construction, continual attention must be paid to the prevention of silting and of weed growth and to the upkeep of over 500 bridges. Rates are levied on landholders to meet the costs of such maintenance. The closer settlement resulting from the drainage schemes has, in many areas, necessitated the construction of new bridges.

The system is administered by the South-Eastern Drainage Board under the South-Eastern Drainage Act, 1931-1974.

## 8.3 ROADS

Roads in South Australia are officially classified either as main roads, being those proclaimed as such under the provisions of the Highways Act, or district roads. Main and district roads within local government areas are vested in the various local governing authorities who primarily are responsible for construction and maintenance works within their respective areas. However, there is provision in the Highways Act for the Commissioner of Highways to construct, reconstruct, and maintain important roads after due notice has been given, and in practice most of the roads carrying heavy traffic are constructed and maintained by the Highways Department. In areas outside the control of local

government authorities roads are vested in the Minister of Local Government under the control and management of the Commissioner of Highways.

Ferry services across the River Murray are provided on a free and continuous basis and are also under the control and management of the Commissioner of Highways.

The following table shows the length, as advised by the Highways Department, of roads customarily used by the public according to type of surface at 30 June 1975. The classification used is that adopted by the Australian Department of Transport.

Length of Roads: Type of Surface, South Australia
At 30 June 1975

	Type of Surface				
Class of Road	N7-41		Paved		Total
	Natural Surface	Formed Only	Unsealed	Sealed	
Noticed Park (a)			Kilometres		
National Roads (a): National Highways (b)	573	744	_ 42	1 280 56	2 639 56
Arterial Roads (d):  Rural	_	525 10	1 707 44	7 545 1 067	9 777 1 121
Local Roads (e);  Rural	35 988 465	22 538 584	19 046 372	3 236 4 433	80 808 5 854
Total	37 026	24 401	21 211	17 617	100 255

<sup>(</sup>a) Roads declared by the Australian Minister for Transport to be national highways, export roads and major commercial roads under the provisions of the National Roads Act 1974.

The natural surface roads shown in the table include tracks in localities outside of local government areas, mainly routes to and between station homesteads and not on land reserved for roads,

In closely settled areas, particularly in the metropolitan area and country towns, most roads are surfaced with bituminous concrete or by bituminous penetration of a macadam base. In rural districts where traffic is light, roads may be formed of natural materials or be only lightly gravelled but the more important country roads are constructed of gravel or crushed rock and are improved, as traffic warrants, by the addition of a bituminous seal.

A continuous program of road improvement is carried out by reconstructing and widening arterial roads in the metropolitan area and the construction and sealing of important rural roads. Extensive road construction is carried out also in new housing development areas.

<sup>(</sup>b) Roads linking State capital cities with other State capital cities, Canberra, Darwin, other specified cities and other roads considered to be of national importance.

<sup>(</sup>c) Roads which facilitate trade and commerce with other countries and other States.

<sup>(</sup>d) Roads declared by the Australian Minister for Transport to be arterial roads under the provisions of the Road Grants Act 1974.

<sup>(</sup>e) Roads not included in above categories.

## ROAD FINANCE

Funds used for roadworks in South Australia are derived from four main sources, namely:

- (1) the net proceeds of fees imposed by the State Government for the registration of motor vehicles and the licensing of drivers;
- (2) grants from the Australian Government:
- (3) charges imposed by the State Government under the Road Maintenance (Contribution) Act;
- (4) property rates and other levies imposed by municipal and district councils.

Funds received from the first three sources are expended by the Commissioner of Highways on works authorised by the Minister of Transport. The Highways Act provides for fees received for vehicle registrations and drivers licences, less cost of collection, to be credited to the Highways Fund. The Fund is credited also with interest on and repayments of advances made to local government authorities for roadworks and for the purchase of machinery; special contributions from the Bus and Tram Division of the State Transport Authority under the Highways Act; contributions from local government authorities towards the cost of lighting roads; licence fees collected under the Hawkers Act, 1934-1960; and other minor sundry receipts. Receipts under the Road Maintenance (Contribution) Act are paid into a special account at the State Treasury and applied only to the maintenance of public roads.

Exact figures are not available for total expenditure in South Australia on the construction, reconstruction, and maintenance of roads, streets, bridges, ferries, and associated works. During five recent years approximate total expenditure by State and local government authorities has been: 1970-71, \$57 million; 1971-72, \$66 million; 1972-73, \$68 million; 1973-74, \$69 million; and 1974-75, \$77 million. These figures include the cost of land purchased for new roads, for road widening, and charges for depreciation of plant and machinery. Local government figures used to derive the totals include expenditure which is subsequently recouped from the public and expenditure on footpath maintenance and stormwater drainage.

Highways Department, South Australia
Receipts and Payments

Particulars	1971-72	1972-73	1973-74	1974-75
		RECEIP	rs (\$'000)	
Motor vehicle registrations, licences,				
fees, fines, etc	18 000	18 828	19 872	25 840
Road Maintenance Charges	3 287	3 401	3 859	4 050
Australian Government Grants (a).	25 500	28 000	31 000	31 770
Loans from State Government Repayments of, and interest on,		800	_	-
advances to local authorities	629	762	386	474
Other	522	1 168	2 028	570
Total	47 938	52 959	57 145	62 704

# Highways Department, South Australia Receipts and Payments (continued)

Particulars	1971-72	1972-73	1973-74	1974-75
		PAYME	NTS (\$'000)	
Construction and reconstruction of roads, bridges, etc	32 049 13 303 580 305	33 604 11 197 619 262	35 210 11 483 653 4	39 180 14 964 675 42
plant, equipment, materials, etc  Other (b)	1 484 2 332	2 032 4 572	339 7 659	888 7 671
Total	50 053	52 286	55 348	63 420

<sup>(</sup>a) For the years 1971-72 to 1973-74 allocations were made under the Commonwealth Aid Roads Act. The allocation for 1974-75 was made under the National Roads Act (\$16-29 million); the Roads Grants Act (\$14-76 million) and the Transport (Planning and Research) Act (\$724 000).

The Local Government Act provides for grants-in-aid to be paid from the Highways Fund to local government authorities for expenditure on roads, other than main roads, and related works: in 1974-75 the total of these grants paid was \$293 578.

The biggest single element of roads expenditure omitted from the above table is the cost of work carried out under the provisions of the Planning and Development Act, 1966-1975 which requires persons and authorities (including the South Australian Housing Trust) who subdivide land for housing to provide roads to certain specifications. The actual work is sometimes performed by local government authorities at the expense of the subdividers: in such cases the costs of construction are included in the figures above but in most cases these roads are constructed by subdividers and few details are available.

#### Australian Government Road Grants

Road grants by the Australian Government have been made to the States since 1923-24. The current road grant arrangements are contained in three Acts—the National Roads Act 1974, the Roads Grants Act 1974 and the Transport (Planning and Research) Act 1974. Under this legislation a total of \$1126 million in road grants was allocated to the States for expenditure over the three years 1974-75 to 1976-77.

In arriving at the current road grant arrangements the Australian Government took into account the Commonwealth Bureau of Roads Report on Roads in Australia 1973. In this report, on the basis of economic considerations, the Bureau set out its assessment of the most appropriate road expenditure programs in each State for the years 1974-75 to 1978-79, and it made recommendations regarding the Australian Government road grants and arrangements considered necessary to achieve these expenditure programs.

<sup>(</sup>b) This includes provision for leave and plant overhauls which may be a negative figure in some years.

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Although the Australian Government was guided to a considerable extent by the Bureau report, the road grant program it adopted differed significantly from that recommended by the Bureau.

Under the National Roads Act 1974, a total of \$400 million in grants was allocated to States. Of this South Australia will receive \$53.9 million or 13.5 per cent. These grants are provided to meet the approved construction and maintenance costs of declared national highways, including, in South Australia, the principal road links connecting Adelaide to Melbourne, Adelaide to Perth and Adelaide to Darwin. Under the National Roads Act, provision is also made for construction and maintenance grants for expenditure on declared roads which facilitate trade and commerce with other countries and between States. These roads are referred to in the legislation as export roads and major commercial roads.

The Roads Grants Act 1974, provided a total of \$700 million in grants to States, of which South Australia will receive \$45 million or 6.4 per cent. These grants are provided for approved expenditures on urban arterial roads, rural arterial and developmental roads, urban local roads, rural local roads and minor traffic engineering and road safety improvements.

Under the Transport (Planning and Research) Act 1974, a total of \$15 million in grants was allocated to States; this includes an amount of \$1·1 million, or 7·3 per cent for South Australia. In the Act a further amount of \$11 million is provided for allocation among the States during the currency of the legislation. This action was aimed at imparting some flexibility to the arrangements, and to allow projects competing for these funds to be judged on their own merits. Grants under this Act are provided to meet two-thirds of the approved cost of all approved planning and research projects undertaken by the States in relation to roads, road transport and urban public transport.

The Australian Government road grants to South Australia under each of these three Acts are shown in the following table.

Auctralian	Government	Boad	Crante	South	Auctralia

Type of Grant	1974-75	1975-76	1976-77	Total
N 1 D 1 4 4 1074 .		\$'0	000	
National Roads Act 1974:  National highways construction	14 900 1 200	15 200 1 300	17 300 1 400	47 400 3 900
Export; major commercial construction and maintenance	300	1 000	1 300	2 600
Total National Roads Act	16 400	17 500	20 000	53 900
Roads Grants Act 1974:  Rural arterial construction  Rural local construction and maintenance  Miters (a)  Urban arterial construction  Urban local construction	1 100 4 400 1 400 6 900 500	1 500 4 500 1 500 6 800 800	2 100 4 300 1 500 6 600 1 100	4 700 13 200 4 400 20 300 2 400
Total Roads Grants Act	14 300	15 100	15 600	45 000
Transport (Planning and Research Act) 1974	300	400	400	1 100
Total	31 000	33 000	36 000	100 000

<sup>(</sup>a) Minor traffic engineering and road safety improvements.

In addition to the grants shown in the above table the Australian Government allocated, in 1974-75, a road grant of \$2.71 million to South Australia to assist employment in the road sector.

As a condition to the receipt of road grants the Australian Government has stipulated that each State should meet, from its own resources, minimum annual road expenditure quotas. These quotas are set out in the Road Grants Act 1974. The quotas for South Australia under this Act are \$25.4 million in 1974-75. \$28.4 million in 1975-76 and \$31.4 million in 1976-77.

## ROADS SURVEY

A survey designated as the Australian Road Survey Update 1974 has been completed as a joint undertaking by the National Association of Australian State Road Authorities and the Commonwealth Bureau of Roads. A report of the results of this survey has been prepared for the Australian Government to use as a basis of road finance legislation for the three years 1977-78 to 1979-80.

One outcome of the Breuning Report (see below) was the appointment of a Director-General of Transport to advise the Minister on transport policy. In 1973 the Director-General submitted a report to the Minister, entitled Public Transport in Metropolitan Adelaide. The report contains a program of improvements to urban public transport ranging from specific projects to be executed in the near future to broad program for up to thirty years in the future. This report has become the basis for current Government policy. A revised document to update this report was commenced in 1975.

## FUTURE DEVELOPMENT

The South Australian Year Book 1970, on pages 319-25, contained some details of the reports of two major studies: these were the reports of the Town Planning Committee of South Australia (Metropolitan Development Plan), submitted in 1962, and the Metropolitan Adelaide Transportation Study (MATS) report, released in 1968. In June 1970, the Government undertook to review the MATS proposals with particular reference to public transport. The resultant Adelaide Transportation Report 1970 or 'Breuning Report', was discussed in the South Australian Year Book 1971, on pages 317-8.

Some extensive and important roadworks have proceeded, and will continue, along lines recommended in the earlier reports. These include major arterial road and street improvements and the construction of a freeway from Little-hampton to Callington scheduled for completion late in 1977. Ultimately, as part of the progressive improvement of the main route to Melbourne, it is intended to extend the South East Freeway from Callington to the outskirts of Murray Bridge: this project is tentatively scheduled for completion by 1979. Also as part of the development of this route, construction of a new bridge over the River Murray near Swanport has commenced and, with its associated roadways, is expected to be completed by 1979.

Another major highway project, the sealing of the Eyre Highway linking Adelaide to Perth, has been under way for some years. It is anticipated that the last unpaved section of approximately 500 kilometres between Ceduna and the Western Australian border will be sealed by October 1976.

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The Highway has been re-routed further south between Yalata and the border to achieve a shorter route and also to enable tourists to enjoy the spectacular coastal scenery at the head of the Great Australian Bight.

## Supplementary Metropolitan Development Plans

In November, 1971 the Government authorised a supplement to the Metropolitan Development Plan of 1962. The effect of the Supplementary Development Plan was firstly to amend the freeway proposals contained in the Metropolitan Development Plan by deleting some sections and varying others, and secondly to recognise that freeway rights-of-way may eventually be used for newer forms of vehicular transport.

Supplementary Development Plans have also been authorised for an area of about 5 hectares of land at Hackney for residential redevelopment and for the area under the jurisdiction of the District Council of Willunga.

The latter Supplementary Plan provides for control of coastal development, proposes a major sub-regional centre at Aldinga and revises road and rail transportation proposals.

The Metropolitan Development Plan and the Supplementary Development Plans, with their reports, must be read together to obtain a complete picture of the proposed routes, details of which were outlined on pages 334-5 of the South Australian Year Book 1973.

Supplementary Development Plans are also being prepared for the City of Adelaide and for that part of the Mount Lofty Ranges which is situated east of the Hills Face Zone but is within the Metropolitan Planning Area. A revised policy for the Mount Lofty Ranges is planned which will severely restrict urban development to defined townships and protect land and water resources.

During 1975 a complete revision of the Metropolitan Development Plan was begun by the State Planning Office. This study will lead to a new development plan which guides development to the year 2006. A large public participation campaign was launched in October 1975 which resulted in a number of valuable suggestions and criticisms from the public: these will be used as a basic input for the planning studies. Public participation will continue at succeeding stages of the study.

#### RESEARCH

Because of the great area of South Australia and the wide variety of climatic and soil conditions, special sections of the Highways Department are engaged in constant investigation and testing of soils, materials, and construction methods to ensure that a high standard of road construction is maintained and that methods are adapted to the needs of particular areas.

South Australia contributes to Australian road development through its active participation in the National Association of Australian State Road Authorities. Specialist committees deal with bridge design, materials research, traffic engineering, bituminous pavements, plant and equipment, and long-term planning. The Association in 1960 established the Australian Road Research Board whose functions include the co-ordination and organisation of road research.

# 8.4 RAILWAYS

Railway systems in South Australia are operated by both the Australian and South Australian Governments. Management of the Australian National Railways is vested in an Australian National Railways Commissioner.

In 1851 a 'Board of Undertakers' was appointed in connection with the construction of the Adelaide to Port Adelaide railway and in 1856 a Board of Railways Commissioners was appointed to control South Australian railway operations. This Board was abolished in 1859 and from then until 1887 control was vested in the Commissioner of Public Works. The South Australian Railways Commissioners Act of 1887 gave almost complete authority for management and administration to three Railways Commissioners, reserving (as in the past) financial control to Parliament. The powers of the three Commissioners passed to one Commissioner in 1892. The South Australian Railways Commissioners Act, 1936-1973, under which the Commissioner was appointed for a period of seven years, incorporated many of the provisions of the 1887 Act, including those for financial control.

In August 1975 the State Government approved the transfer of non-urban railways to the Australian National Railways Commission, such transfer to be operative from a date to be declared. In December 1975, under the provisions of the South Australian Railways Commissioners Act Amendment Act, 1975 the State Transport Authority took over control of the South Australian Railways, including non-urban lines pending their full amalgamation with the Australian National Railways. For further details see page 538.

In South Australia the only private railways open to general traffic are the lines owned by the Broken Hill Proprietary Co. Ltd: from Iron Knob and Iron Baron to Whyalla (82 kilometres) used for the carriage of iron ore; and from Coffin Bay to Port Lincoln (40 kilometres) used for the carriage of limesand.

At 30 June 1975 the route length of railways operated by the State and Australian Government, open for traffic in South Australia totalled 5 908 kilometres. This consisted of 2 531 kilometres of broad gauge, 1 823 kilometres of standard gauge and 1 554 kilometres of narrow gauge.

Only a small portion of the Adelaide metropolitan area is served by railways, the main trunk routes passing through northern and southern suburbs. The line to Port Stanvac serves south-western suburbs and carries passenger traffic as far as Hallett Cove and goods traffic to Port Stanvac; an extension of this line to Christie Downs was opened for traffic on 25 January 1976. This line will serve the rapidly expanding industrial and housing development along the coast south of Adelaide. The Port Adelaide line, its extensions to Semaphore and Outer Harbor, the branch line to Grange, and spur lines to industrial establishments provide better coverage in north-western suburbs than is achieved elsewhere in Adelaide.

Lines operated by the Australian Government in South Australia at 30 June 1975 were: narrow gauge from Marree to the Northern Territory border, 591 kilometres; and standard gauge from Port Pirie Junction to the Western Australian border, 1051 kilometres, Stirling North to Marree, 349 kilometres, and Port Augusta to Whyalla, 76 kilometres.

An agreement has been reached between the South Australian and Australian Governments for the construction of a standard gauge line between Tarcoola in South Australia and Alice Springs in the Northern Territory to replace the existing narrow gauge line from Marree to Alice Springs; the enabling legislation was passed by the Australian and South Australian Parliaments in 1974. The contract for the initial construction was let in March 1975 and it is anticipated that the whole project will be completed in the early 1980s. The route for the 830 kilometre line, estimated to cost \$145 million, has been carefully chosen to avoid areas subject to the flooding which renders the existing line inoperative for prolonged periods.

A more detailed historical survey on railways in South Australia was included on pages 263-6 of the South Australian Year Book 1966.

# Standardisation of Rail Gauges

The existence in South Australia of narrow, standard, and broad gauge systems has already been noted. For many years railway administrators have been greatly concerned about the increased costs and decreased efficiency associated with the transhipment of goods and passengers and with the provision, maintenance and operation of different sets of rollingstock. During recent years with the rapid development of road and air transport facilities there has been increasing pressure for standardisation of rail gauges in the interests of efficiency and economy of operation of transport services as a whole.

As part of an agreement enacted in 1949 to convert much of the South Australian Railways system to standard guage, in 1963 the Australian Government decided to proceed with standardisation of the Port Pirie-Broken Hill Railway. During 1967 agreement was reached between the Governments of Australia, New South Wales and South Australia to link Cockburn and Broken Hill along a new line of 47 kilometres instead of converting the 56 kilometres previously owned and operated by the Silverton Tramway Company. Conversion of the Port Pirie-Cockburn section was completed during 1969, and the new Cockburn-Broken Hill line, owned and operated by the South Australian Railways, was completed in January 1970. The first revenue-earning passenger train to use the coast-to-coast standard gauge line left Sydney on 2 March 1970 for the 3 961 kilometre run to Perth.

With the opening of the Port Pirie-Broken Hill standard gauge railway and the extension of the broad gauge from Terowie to Peterborough, the South Australian Railways now operate two bogie exchange depots, one at Port Pirie and the other at Peterborough.

Before the financial provisions of the railways standardisation agreement can become effective in relation to any specific project Australian Government acceptance of that project is necessary. Early in August 1969 it was announced that the Australian and South Australian Governments had agreed on the terms of reference for a feasibility study on standardisation of the Adelaide-Port Pirie line and the carrying of traffic on existing narrow gauge lines affected by standardisation. Consultants were engaged to carry out the study and in March 1970 they submitted a report to the Australian Government. The State Government submitted alternative proposals expected to provide a more comprehensive scheme of standardisation and offering greater operational savings at a cost not greater than that estimated by the consultants.

Following consideration of the two proposals, consultants were commissioned to prepare a master plan which was duly presented to the respective Governments in January 1974. Enabling legislation was passed by both Parliaments late in 1974.

The scheme provides for a new standard gauge track to be built from Adelaide to Crystal Brook and the standard gauge line from Crystal Brook to Port Pirie to be duplicated. Standard gauge will be provided also as a third rail addition to the existing broad gauge track between Snowtown and Wallaroo.

In the Adelaide Metropolitan Area a standard gauge freight connection will be provided to Mile End, Islington, Pooraka and Port Adelaide while the passenger facilities at Adelaide Railway Station will be extended to handle standard gauge passenger trains. Standard gauge marshalling yards will be constructed at Dry Creek and will include bogie exchange facilities which will replace the present bogie exchange depot at Port Pirie. The broad gauge lines from Virginia to Port Pirie and Bumbunga to Lochiel will be closed.

The project is estimated to cost \$77.7 million and will be financed by the Australian Government on a 70 per cent grant and 30 per cent loan basis. The first major field study for the project commenced in January 1975 and detailed work is now proceeding. It is expected that the project will be completed in the early 1980s.

# 8.5 HARBOURS AND AERODROMES

## **HARBOURS**

The State of South Australia, including Kangaroo Island, has a coastline of more than 3 850 kilometres. There are two large indentations, Gulf St Vincent and Spencer Gulf, which have many harbours for shipping.

Of many seaports in South Australia, at present only sixteen are used by commercial shipping: nine of these have State-owned wharves or jetties and seven have privately-owned wharves or jetties. In addition the State maintains jetties or wharves for promenade and fishing purposes at forty-eight ports that are no longer used by commercial shipping and seventeen jetties are leased to district councils.

The Broken Hill Proprietary Co. Ltd owns and operates bulk handling facilities at Ardrossan, Rapid Bay, Whyalla and Proper Bay, while the Colonial Sugar Refining Co. Ltd owns and operates a bulk loading installation at Ballast Head, Kangaroo Island. The Australian National Railways operates the wharf at Port Augusta on behalf of the Australian Government, and the Port Stanvac oil terminal is owned by Petroleum Refineries (Aust.) Pty. Ltd.

There are six deep-sea ports operated by the State, namely Port Adelaide, Port Pirie, Port Lincoln, Thevenard, Wallaroo and Port Giles while overseas vessels are also accommodated at Port Stanvac, Port Augusta, Whyalla and Ardrossan.

### CONTROL OF HARBOURS

The control of State-owned harbours (including the River Murray) is vested in the Minister of Marine; he is responsible for the control of navigation within harbours and for all harbour facilities including lights, buoys, beacons, bulk loading plants and fishing boat accommodation. Relevant legislation includes the Harbors Act, 1936-1974, the Marine Act, 1936-1975 and the Fisheries Act, 1971-1975.

In 1974-75 the Department of Marine and Harbors handled 8 278 037 tonnes of cargo (including general cargo at private ports) or approximately 44 per cent of the total tonnage of 18 634 205 tonnes passing through all the ports in South Australia, the balance being handled independently at the privately owned wharves.

# Department of Marine and Harbors Indebtedness, Revenue and Expenditure

		Loan Fund		Expenditu	ire from	Revenue	Surplus (+)
	Year	Indebted- ness	Revenue	Working Expenses	Interest	Total	or Deficit (—)
<del></del>		:		\$	'000		
1970-71		. 55 081	7 628	5 056	2 431	7 487	+141
1971-72		. 57 824	7 813	5 393	2 796	8 189	376
1972-73		. 62 655	7 324	5 453	3 028	8 481	-1 157
		. 67 082	10 037	6 537	3 359	9 896	+141
			10 889	8 425	3 828	12 253	-1365

#### HISTORICAL.

For a detailed description of development in the nineteenth century see pages 270-1 of the South Australian Year Book 1966.

# Trend of Development

As shipping has increased through growth in trade many wharves and jetties have been strengthened or replaced by better structures. To keep most harbours open for larger vessels it has been necessary to deepen and widen navigation channels, deepen existing berths and extend jetties into deeper water. An example of this type of project was the redevelopment of Thevenard harbour, completed in 1972, which entailed the dredging of a deeper channel and the reconstruction of the jetty so that bulk carriers twice the size of those previously accommodated could be fully loaded.

Since the establishment of new soldier settlements in the 1950s, shipping to and from Kangaroo Island has increased. Additional harbour facilities were made available with the provision of a trailership berth at Kingscote for the roll-on roll-off vessel m.v. *Troubridge* which went into service in November 1961. Trailership berths were also built at Port Adelaide and Port Lincoln.

A change in the pattern of intrastate shipping has occurred with the provision of bulk handling facilities for grain at major ports progressively since 1952. These facilities are now available at Port Adelaide, Port Pirie, Wallaroo, Port Lincoln, Thevenard and Port Giles, and also at Ardrossan under agreement with the owner of the private wharf. Grain is railed or trucked overland to terminal silos and loaded aboard ocean-going vessels by means of conveyors, so eliminating ketch trade from the smaller ports. Competition from intrastate road and rail transport has affected the larger ports as well, so that very little general cargo is carried between ports in this State.

To alleviate the delay in turn-round of vessels and to improve the handling of shipping cargo, port facilities in the major harbours have been or are being improved by the reconstruction of wharves, deepening of berths and channels, installation of cranes and increasing storage capacity. The construction of boat havens for fishing craft, and the provision of slipways at several ports throughout the State are other recent developments.

Future developments at ports other than Adelaide are likely to be concerned primarily with bulk trades and the increasing size of bulk carriers. For example, bulk handling facilities, expected to cost \$10.8 million and to be completed in 1976, are being installed at Port Lincoln. The project involves extension of an existing jetty to provide two outer berths for loading grain ships and an inner berth for unloading phosphate-rock carriers: the grain berths will cater at first for ships up to 60 000 tonnes but could be modified for ships of 100 000 tonnes, while the phosphate-rock berth will cater for ships up to 35 000 tonnes.

# **Development of Port Adelaide**

The Greater Port Adelaide Plan, details of which were released in 1949, included proposals for twenty projects for port development over the ensuing fifty years. Among those projects were:

- (1) the improvement and extension of wharves and allied cargo facilities;
- the deepening, and widening of the shipping channels and provision of larger swinging basins;
- (3) the reclamation and development of low-lying land adjacent to the port for the creation of industrial, commercial and dock estates.

Some of these projects have been completed while others are still in progress, e.g. the Port River has been deepened to 9 metres at Low Water and a swinging basin of 305 metres diameter has been provided in the inner harbour. Currently the river channel is being widened to a minimum width of 150 metres. The material dredged in this operation is being used to reclaim part of the 800 hectares of low-lying land intended to be used for industrial and commercial sites and for port extensions.

At present, container ships do not call regularly at ports in South Australia; containers are usually transported to Melbourne and shipped from there. However, planning is proceeding on the assumption that Port Adelaide will become a regular port of call for container ships in the future. As a result 160 hectares of land are being reclaimed at Pelican Point near the outer harbour where it will be possible to provide up to 2 000 metres of berth length with a depth of 14 metres Low Water if necessary. One berth on this waterfront for use by large container ships and roll-on roll-off vessels is under construction and it is expected to be completed in 1976. The approach channel and swinging basin

are being deepened to 12 metres at Low Water to enable the largest container ships to berth at any state of the tide. The estimated cost of this project is \$7.7 million

Two container depots have been built by private enterprise in the dock industrial estate 800 metres from the inner harbour waterfront and offer acceptance, forwarding, packing and unpacking facilities for international and interstate containers and other unit loads: to facilitate shipment of wool in containers a large wool store and a high density wool dumping centre have been established adjacent to these depots,

An interstate roll-on roll-off terminal in No. 3 Dock was opened early in 1971 and later in the year the facilities were extended to serve larger roll-on roll-off vessels engaged in overseas trade. A berth in No. 1 Dock has been modified to provide a reinforced concrete pad for the stern-loading type of vessel to operate between Port Adelaide and ports in Tasmania. Recent developments include the provision of a steel handling berth to accommodate roll-on roll-off vessels and modifications to an outer harbour berth to serve larger overseas roll-on roll-off vessels.

A two-storey building, containing a passenger terminal and cargo shed for overseas vessels at one of the outer harbour berths, was opened in October 1973. A new signal tower at the outer harbour, to replace the existing one, was opened in February 1974.

# TIDES AND WATER DEPTH

Tides—the daily ebb and flow of the waters of the ocean—are brought about by the gravitational effect of the sun and moon. Spring and neap tides are associated with phases of the moon, i.e. spring tides with the new moon and full moon, and neap tides with the first quarter and last quarter of the moon.

Tides and Water Depths: South Australian Ports, 1 January 1975

					Maximum		Tides			
	<b>D</b> .				Depth below Low		Mean Rise			
	•		Water Datum (a)	At	Higher High Water	Lower High Water				
Port Adelaide:							Metres		Metres	Metres
Outer harbour; Channel Wharf		•••		 :	• •		10·1 10·7	Wharf	2.4	2.0
Inner harbour; Channel Wharf		••	• • •		• •	• •	9·1 10·7	Wharf	2.4	2.0
Ardrossan: Channel Jetty—BHP							(b) 8·2	Jetty	2.7	2·1

Tides and Water Depths: South Australian Ports, 1 January 1975 (continued)

	Maximum Depth	ι	Tides	
Port	below Low Water	,	Mear	Rise
ron	Datum (a)			Lower High Water
Post Assessed	Metres		Metres	Metres
Port Augusta: Channel	. 4·9 . 6·1	Wharf	2.8	2.2
Port Giles: Channel		Jetty	1.9	1.5
Port Lincoln: Channel	. (c) . 15·0	Jetty	1.5	1.1
Port Pirie: Channel Wharves.		Wharf	2.5	1.8
Port Stanvac: Channel		Wharf	1.9	1·4
Proper Bay (BHP): Channel		Jetty	1.5	1·1
Thevenard: Channel		Jetty	1.5	1-1
Wallaroo: Channel Wharf		Jetty	1.5	0.9
Whyalla (BHP): Inner harbour; Channel Wharf		Jetty and Wharf	2.5	1.8
Outer harbour; Channel—ore jetty (No. 2) approach Ore jetty (No. 2)	. 10·7 . 11·0	Jetty and Wharf	2.5	1.8

<sup>(</sup>a) The depth shown against wharves is the greatest at present available and may be found at one berth only at the wharf or jetty concerned.

<sup>(</sup>b) No approach channel. (c) Deep water gradually shoaling to depth at wharf.

All around the Australian coast there is a well-marked 'diurnal inequality'; that is, the forenoon and afternoon tides may differ considerably in height. The mean tide rises in the preceding table are shown as higher high water and lower high water, rather than high water springs and neaps. This method of measuring tides is used for the majority of Australian ports.

## **AERODROMES**

There were twenty-nine civil aerodromes in South Australia at 30 June 1975 including nine owned and operated by the Australian Government and twenty licensed aerodromes owned and operated by local authorities or private interests. In addition there are several authorised landing grounds which are fields prepared for the operation of aircraft but not open to public use. These fields meet Australian Government specifications less exacting than those used in the development of government owned or licensed aerodromes.

Government and licensed aerodromes in South Australia are set out below.

	Government Owned	
Adelaide	Leigh Creek	Parafield
Ceduna	Mount Gambier	Port Lincoln
Kingscote Oodnadatta		Whyalla
	Licensed	
Amata	Granite Downs	Mount Dare
Cleve	Indulkana	Naracoorte
Cordillo Downs	Innamincka	Port Pirie
Cowell	Kimba	Renmark
De Rose Hill	Loxton	Tieyon
Ernabella	Millicent	Waikerie
Fregon	Minnipa	

The main terminal in South Australia is the Adelaide Airport at West Beach, and although not an international airport it can be used by international aircraft when required. It is on the scheduled flights of interstate services from Sydney, Melbourne, Perth, Canberra and Darwin and is the terminus of intrastate services. Since this airport was opened to commercial aircraft in February 1955, modern navigational aid systems and equipment (e.g. Australian designed visual approach slope guidance systems and long range radar) have been installed and various improvements to general airport facilities have been carried out.

Since the opening of the Adelaide Airport the aerodrome at Parafield, about 18 kilometres north of Adelaide, has been restricted principally to use by light aircraft.

Other aerodromes are situated near the larger towns e.g. Mount Gambier, Whyalla, Port Lincoln and Port Pirie. About half of the licensed aerodromes are on stations, missions, etc. in the northern part of the State.

In addition to the civil aerodromes there are two major aerodromes, one at Woomera controlled by the Department of Defence, through the Weapons Research Establishment, and the other at Salisbury (Edinburgh Airfield) which are used by aircraft associated with trials operations and by civil charter aircraft carrying passengers and freight. Edinburgh Airfield is also the base for a Royal Australian Air Force maritime squadron.

A joint Government Advisory Committee consisting of representatives from Australian Government Departments, South Australian Government Departments and local government authorities has been established to consider airport requirements for the Adelaide region.

## Control of Aerodromes

At a conference of Australian Government Ministers and State Premiers in May 1920, it was agreed that the Australian Government should introduce a Bill to give effect to the Convention for the Regulation of Air Navigation signed in Paris on 13 October 1919. The Air Navigation Act 1920, under which a Controller of Civil Aviation was appointed as head of the Civil Aviation Branch which came under the jurisdiction of the Department of Defence, had three main objectives:

- (1) generally to regulate civil aviation activities in Australia;
- (2) to carry out the provisions of the Convention on Air Navigation signed in Paris;
- (3) to apply the principles of the Convention to domestic as well as international flying operations.

Regulations were drawn up under this Act to provide, *inter alia*, for the registration and periodic inspection of aircraft, licensing of aerodromes, examination and licensing of personnel engaged in flying and in upkeep of machines, control of aircraft movements, rules of the air, etc.

The South Australian Parliament passed the Commonwealth Powers (Air Navigation) Act, 1921 in which it referred to the Australian Government powers to make regulations in connection with international and interstate air navigation. The Air Navigation Act, 1937 provided for the application of the Australian Government Air Navigation Regulations to and in relation to air navigation within the State of South Australia and repealed the earlier Act.

The Australian Government civil aviation legislation at present includes the Air Navigation Act 1920-1974, the Australian National Airlines Act 1945-1975 and several other Acts, while the State legislation in South Australia includes the 1937 Act and the Civil Aviation (Carriers' Liability) Act, 1962-1971.

Civil aviation administration was a separate department under the Minister for Civil Aviation from 1939 until 1 December 1973 when it was incorporated in the Department of Transport.

## Historical

A description of early aerodromes in South Australia and development was included on pages 277-8 of the South Australian Year Book 1966: an article describing the first flight from England to Australia, in 1919, appeared on pages 334-5 of the South Australian Year Book 1969.

# 8.6 ELECTRICITY AND GAS

## ELECTRICITY

In 1946 the Electricity Trust of South Australia (ETSA), a public corporation, acquired the assets of the Adelaide Electric Supply Company and since then the Trust has been responsible for electricity supply throughout most of the State. Over the years indigenous fuels—coal from Leigh Creek and natural gas from the north-east of the State—have largely supplanted imported fuels. A detailed description of the development of electricity supply was included on pages 278-81 of the South Australian Year Book 1966.

# Power Generation

The Osborne 'A' station produced all of the requirements of the South Australian electricity net-work from 1923 until 1947 when the 'B' station commenced operations and the 'A' station was subsequently closed in 1968. At 30 June 1975 the remaining generating capacity at Osborne (excluding emergency generating plants) was 240 000 kilowatts.

A major decision by the Trust was the construction of the Thomas Playford Power Station at Port Augusta, designed to burn Leigh Creek coal exclusively. The 'A' section was completed in 1954 while the 'B' section was completed in 1964 to give a combined total generating capacity of 330 000 kilowatts.

Following the passing of the Electricity Trust of South Australia (Torrens Island Power Station) Act in 1962 work commenced on the construction of section 'A' of the Torrens Island Power Station. Section 'A' was completed in the first half of 1971 and comprises four 120 000 kilowatt turbo-generators with associated boiler equipment. Construction of the first two 200 000 kilowatt turbo-generator units and associated boiler plant in Section 'B' continued during the year. Orders for a further two 200 000 kilowatt turbo-generators and gasfired boilers (with oil standby) have been placed and when completed Section 'B' will have four 200 000 kilowatt units and this will make the combined capacity of 'A' and 'B' sections of Torrens Island Power Station 1 280 000 kilowatts.

Electricity Generation, South Australia

Installed Capacity of Generating Plant in Power Stations at 30 June

Power Stations	1967	1970	1973	1974	1975
Electricity Trust:	···		kilowatts		
Osborne	311 525	240 000	240 000	240 000	240 000
Port Augusta	330 000	330 000	330 000	330 000	330 000
Torrens Island		360 000	480 000	480 000	480 000
Dry Creek	_	_		104 000	104 000
Mount Gambier	22 000	22 000	22 000	22 000	22 000
Port Lincoln	9 000	9 000	9 000	9 000	9 000
Total ETSA	792 525	961 000	1 081 000	1 185 000	1 185 000

At the Dry Creek Power Station, three gas turbo-generators each with a capacity of 52 000 kilowatts have been installed to meet high load demands of short duration. The first machine was commissioned in November 1973, the second in May 1974, and the third in September 1975.

## Fuels

The development of the Leigh Creek coal field and the use of this coal as a source of power freed the Trust from its relative dependence upon New South Wales coal as a fuel source. Since commissioning, the Thomas Playford Power Station at Port Augusta has used this type of fuel exclusively.

The construction of oil refineries in Australia resulted in residual oil being supplied at a price competitive with coal and, over the years, the Osborne Power Station and, more recently, the Torrens Island Power Station, have used this type of fuel.

Natural gas discoveries in the north-eastern areas of South Australia and the construction of a natural gas pipeline to Adelaide has given the Trust a further source of indigenous fuel. The four 120 000 kilowatt boilers at Torrens Island have been equipped to use natural gas or oil, or both fuels simultaneously. The Trust commenced using natural gas in 1969 and it uses more of this type of fuel for generation than any other electricity authority in Australia.

Wood has also been used since the construction of the Mount Gambier and Nangwarry power stations. Its future as a fuel is, however, uncertain and depends on alternative uses of waste wood, particularly in the pulp industry.

Electricity Trust of South Australia, Fuels Consumed in Steam Power Stations

Year	NSW Coal	Leigh Creek Coal	Oil	Wood (a)	Coke	Natural Gas
			Tonnes			Millions of MJ
1966-67	51 045	2 123 459	232 674	187 687		
1969-70	3 430	2 155 239	299 180	185 629		5 673
1972-73		1 588 735	37 893	198 496		29 040
1973-74		1 504 839	47 691	147 210		33 048
1974-75	<del></del> ,	1 792 144	91 758	139 071	_	31 256

<sup>(</sup>a) Mill waste.

## Transmission and Distribution

The Electricity Trust was specifically charged with the responsibility of expanding its services into country areas. In the immediate post-war years shortages of materials somewhat handicapped the rate of extension; however, a vigorous expansion of services in general has taken place as illustrated in the following table.

Electricity	Trust	of	South	Australia,	Transmission	Lines
			At :	30 June		

Rated Voltage	1967	1970	1973	1974	1975
		R	oute Kilor	netres	
275 000 volt	. 595	716	745	745	745
132 000 volt		2 232	2 581	2 581	2 581
66 000 volt	. 750	832	1 246	1 257	1 326
33 000 volt		3 499	3 487	3 559	3 578
19 000 volt (SWER) (a)	. 13 591	17 083	18 694	18 915	19 437
11 000 and 7 600 volt		10 731	12 076	12 652	13 252
Total	. 29 380	35 093	38 830	39 709	40 919

(a) Single wire earth return system,

Electric power is transmitted over considerable distances at very high voltages and is stepped down at substations and distribution centres.

Transmission lines of 275 000 volts link power stations at Port Augusta and Torrens Island to a major substation at Para from which 275 000 volt connections radiate to Magill, Cherry Gardens and Happy Valley substations serving the Adelaide metropolitan area. One line from Port Augusta is tapped into a substation at Brinkworth to reinforce distribution to the mid-north area of the State. Construction of the 275 000 volt transmission line from Para (east of Elizabeth) to Tailem Bend has continued during the year. This line will be completed in 1976 and will improve reliability and provide increased capacity to meet loads supplied from Tailem Bend substation including the whole of the South East.

Two 132 000 volt lines also link Port Augusta and Adelaide. These lines follow similar routes from Port Augusta to Bungama, near Port Pirie, where a substation serves the mid-north area. From Bungama the lines diverge, one passing through South Hummocks where a substation serves Yorke Peninsula and surrounding areas, and the other running via Brinkworth to Waterloo where a substation serves the Upper Murray.

Transmission lines of 132 000 volts extend as far as Woomera, Leigh Creek, Berri, Whyalla, Port Lincoln, Ardrossan South, Mobilong and Mount Gambier.

Extensive use of the single wire earth return system (see table above) has resulted in the supplying of electricity to country areas where consumers are so scattered that supply by conventional methods would have been impracticable.

In recent years there has been a progressive change from conventional overhead street mains to underground street mains and most new subdivisions are now being supplied with 11 000 volt and low voltage underground systems.

In the following table the numbers of Electricity Trust consumers in the various categories are given at selected dates.

Electricity	Trust	of	South	Australia,	Number	of	Consumers
			A	t 30 June			

Consumers	1967	1970	1973	1974	1975
Residential	. 38 950	353 289 41 773 22 776 7	392 314 43 739 25 615 11	405 678 44 479 26 768 10	417 996 44 947 27 487 11
Total	. 380 644	417 845	461 679	476 935	490 441

## GAS

The South Australian Gas Company, a privately owned company regulated by State legislation, was incorporated by Act of Parliament in 1861 to supply gas to Adelaide and surrounding villages. The first gas was produced at Brompton in 1863 and subsequent plants were opened at Port Adelaide in 1866 and Glenelg in 1875.

An Act authorising a second company, the Provincial Gas Company, was assented to in 1869. This company established a metropolitan works at Thebarton in 1871 and country works were opened at Gawler, Kapunda and Strathalbyn. In 1878 this undertaking was absorbed by the South Australian Gas Company and manufacturing at the Thebarton plant ceased. The country works were kept in operation until 1917. Gas was first produced at Port Pirie in 1892.

Following the development of higher pressure distribution facilities the South Australian Gas Company was able to centralise its metropolitan production at Brompton with the Port Adelaide and Glenelg plants ceasing production in 1922 and 1923 respectively. These plants together with the earlier Thebarton works were retained as holder stations. In 1928 a new gas works was opened adjacent to the Port River at Osborne. The Osborne works were closed for several years during the 1930s depression.

Since the 1939-45 War a considerable expansion of manufacturing capacity and distribution facilities has taken place. This is evident from the following table which gives details of capital employed, number of consumers and length of mains at 30 June in selected years.

South Australian Gas Company: Capital, Consumers and Mains At 30 June

Particulars	1940	1950	1960	1970	1975
Capital employed (\$m)  Number of consumers (a)  Length of mains (km)	5·4	6·0	19·4	40·0	47·0
	61 207	84 629	121 720	186 670	215 263
	1 455	1 677	2 525	3 603	4 223

<sup>(</sup>a) Includes consumers of bottled gas.

The manufacture of gas by the carbonisation of black coal imported from New South Wales was the conventional method of production until the end of the 1939-45 War. Under this process large quantities of coke and tar are produced as by-products but a declining market for these residuals together with the development of alternative production methods has resulted in less emphasis in recent years on this method of production.

In 1948 and 1950 the company installed plant at Osborne and Brompton for the manufacture of carburetted water gas from oil distillate and coke. This plant was introduced to help meet peak winter loads and could be brought into production much more rapidly than carbonising retorts.

In 1964 the first of four reforming plants was installed at Brompton. These plants operated initially on refinery tail gases and modifications were subsequently made to enable all four plants to reform a wider range of feedstocks, including light virgin naphtha and natural gas. A similar plant is in operation at Port Pirie for reforming light virgin naphtha.

When natural gas became available, the South Australian Gas Company contracted with the producers for a supply of this indigenous fuel. All coal carbonising and carburetted water gas plants making gas for distribution in the metropolitan area were shut down and the reforming plants ceased to operate in 1971 when the conversion of all appliances to use natural gas was completed. One section of the coal carbonising plant has been retained at the Osborne Works for the manufacture of metallurgical grade coke. Gas resulting from carbonisation is used partly for heating the coal chambers, the remainder being sold.

Gas is reticulated through most of the metropolitan area and Port Pirie. In addition liquefied petroleum gas is distributed by reticulation at Mount Gambier by the Mount Gambier Gas Company Ltd, at Whyalla by the South Australian Gas Company, and is available elsewhere as bottled gas.

An inter-connected system of high and intermediate pressure mains traverses the metropolitan area, extending south to Hackham, north-east to Tea Tree Gully and north to Elizabeth. The pressure in these mains is reduced by means of governors for distribution to consumers.

The conversion of the metropolitan distribution system to use straight natural gas brought a marked change in the Company's operations. The Company is now concerned largely with the distribution and marketing of gas, rather than manufacturing. Great emphasis is placed on marketing gas to industry, where as a cheap, non-polluting fuel it is able to compete successfully with other fuels. This has produced the situation where industrial gas sales made up 54 per cent of all gas sold in 1975 compared with 14 per cent in 1969.

At 30 June 1975 the company was maintaining 4 093 kilometres of mains in the metropolitan area serving 180 132 consumers with natural gas. The Port Pirie system involves 85 kilometres of mains serving 4 273 consumers. A distribution system has also been developed in Whyalla over the past five years, and at 30 June 1975 involved 45 kilometres of mains serving 1 786 consumers. An additional 29 072 customers are supplied with liquified petroleum gas in bottles.

# 8.7 HOUSING AND BUILDING

## HOUSING

A feature of housing development in South Australia has been the change from the use of stone to brick as the major building material. The familiar old-style stone houses are still to be seen in most settled parts of the State, especially in rural areas. The 1947 Census was the first at which houses with outer walls of brick outnumbered those with walls of stone.

The building materials used have largely been determined by the availability of building stone and deposits of clay suitable for brickmaking, and by the relative lack of natural timbers suitable for houses. In recent years brick veneer homes have become more popular, particularly in Urban Adelaide, but this is partly because of the poor building soil in some of these areas.

# **DWELLINGS: CENSUS DATA**

Information on housing is obtained mainly from particulars of dwellings collected at each census. For the purpose of the census a 'dwelling' is any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building. The term 'dwelling' includes houses, home units and flats, and in addition habitations ranging from a single-roomed shack to a multi-roomed hotel or institution. Dwellings have been classified as 'private' or 'non-private'. Private dwellings include private houses, home units, shares of private houses, self-contained flats, shares of self-contained flats, rooms, apartments, sheds and huts; non-private dwellings include hotels, motels, boarding houses, lodging houses and hostels, educational, religious, and charitable institutions, hospitals, and defence and penal establishments.

Dwelling counts from the seven censuses to 1971 are shown in the next table: figures for censuses before 1966 exclude dwellings occupied solely by full-blood Aborigines.

Canana		Occupied	Unoccupied	Total	
Census	Private	Non-private	Total	(a)	Dwellings
1921	104 295	3 619	107 914	4 431	112 345
1933	136 611	2 663	139 274	5 353	144 627
1947	166 118	2 420	168 538	3 547	172 085
1954	212 095	3 206	215 301	8 524	223 825
1961	259 344	2 564	261 908	17 061	278 969

2 693

2 048

Dwellings in South Australia, Censuses 1921 to 1971

1971 . . . . . . 342 064

299 933

Total dwellings more than trebled in the fifty years to 1971, with the greatest increase (about 203 000 out of a total of 262 000) occurring subsequent to the 1947 Census.

302 626

344 112

25 110

30 553

327 736

374 665

<sup>(</sup>a) See page 400 'Unoccupied Dwellings'.

In some of the tables which follow, details of dwellings at the 1971 Census are given by geographical distribution. New criteria were adopted at the 1966 Census for the delimitation of urban centres, a full description of which is contained in Part 5.2 pages 123-4. The relevant tables show totals for each section of the State only, namely:

- (a) Urban Adelaide; this area is the 'urban centre' of Adelaide.
- (b) Other Urban; includes all urban centres other than Urban Adelaide.
- (c) Rural; includes all areas not included in (a) or (b) above.

## Occupied Dwellings

The next table gives details of occupied dwellings only, according to the class of dwelling. Private dwellings were classified into the following four categories at the 1971 Census:

Private House; houses (including semi-detached and terrace houses) used for dwelling purposes by a household group;

Home Unit; one of a group of three or more single or double storey homes, separate or joined together in sets of two or more, all occupying a common block of land:

Other Self-contained Flat; a part of a house or other building which can be completely closed off and which has its own cooking and bathing facilities;

Other Private Dwelling; includes non-self-contained flats and such sheds, huts, caravans, etc. which are occupied on a permanent or semi-permanent basis.

# Occupied Dwellings by Class, South Australia Censuses 1966 and 1971

	30 June 1966		30 June	1971	
Class of Dwelling	Total	Urb	an	Rural	
	1 otai	Adelaide	Other	Kurai	Total
Private dwellings:					
Private house (a)	271 171	210 921	48 420	47 287	306 628
Home unit (a)	n.a.	12 604	699	127	13 430
Other self-contained flat (a)	20 802		1 377	358	16 569
Other private dwelling	7 960	2 836	1 095	1 506	5 437
Total private dwellings	299 933	241 195	51 591	49 278	342 064
Non-private dwellings	2 693	988	542	518	2 048
Total occupied dwellings	302 626	242 183	52 133	49 796	344 112

<sup>(</sup>a) At the 1966 Census, home units were included in the 'Private house' or 'Other self-contained flat' categories.

Although tables showing characteristics of dwellings by their class at both the 1966 and 1971 Censuses have been included, intercensal comparisons of these characteristics should be made for total dwellings only.

The 1971 Census classification of private dwellings was changed from that used at the 1966 Census to distinguish those dwellings classed as home units which were shown as houses or self-contained flats in the 1966 and previous censuses. Because of this change in the classification and because there are no standard definitions of home units and flats in common usage, it is not possible to draw comparisons between statistics at the 1971 Census and earlier censuses of houses, home units and self-contained flats.

The following table shows the number of persons enumerated in each class of dwelling at the last two censuses.

# Number of Inmates by Class of Dwelling, South Australia Censuses 1966 and 1971

Particulars	30 June 1966		30 June	1971	
Particulars	Total	Urb	an	Rural	Total
	Total	Adelaide	Other	Kurai	Total
Persons enumerated: In private dwellings:					
Private house (a)	981 870	723 702	166 919	168 190	1 058 811
Home unit (a)	n.a.	22 029	1 434	298	23 761
Other self-contained flat (a)	45 268		3 098	851	34 262
Other private dwellings	17 746	4 794	2 510	4 111	11 415
Total private dwellings	1 044 884	780 838	173 961	173 450	1 128 249
In non-private dwellings	47 217	28 592	9 147	5 540	43 279
Total occupied dwellings	1 092 101	809 430	183 108	178 990	1 171 528
Persons not enumerated in dwellings:					
Campers-out	1 310	52	79	158	289
Migratory	1 573	••	••	••	1 890
Total population	1 094 984	809 482	183 187	179 148	1 173 707

<sup>(</sup>a) At the 1966 Census, home units were included in the 'Private house' or 'Other self-contained flat' categories.

The percentage of persons enumerated in private dwellings was 95.4 at the 1966 Census, and by 1971 this percentage had increased slightly to 96.1. The percentage of persons enumerated in non-private dwellings decreased from 4.3 to 3.7.

## Occupied Private Dwellings

There were 299 933 occupied private dwellings at 30 June 1966, and by 30 June 1971 this number had increased to 342 064. Characteristics of these dwellings are shown in the tables which follow.

# HOUSING AND BUILDING

# Occupied Private Dwellings by Number of Rooms, South Australia Censuses 1966 and 1971

Number of Rooms	30 June 1966		30 Ju	ne 1971	
Per Dwelling	Total	Private House	Home Unit	Other Self- contained Flat	Total (Including Other Private)
1	2 672	305	273	651	3 636
2,	6 151	1 416	1 940	2 792	7 496
2	. 13 701	6 512	5 747	6 510	19 637
1	38 259	36 721	4 816	4 866	46 756
E	133 746	158 321	512	1 085	160 110
6	. 66 310	68 741	88	345	69 289
7	25 209	22 544	27	132	22 786
0 and arran	13 885	12 068	27	188	12 354
Total	299 933	306 628	13 430	16 569	342 064
Average number of rooms per dwelling	5.3	5.3	3.3	3.3	5.1

# Occupied Private Dwellings by Number of Inmates, South Australia Censuses 1966 and 1971

Number of Inmates		30 June 1966		30 Jui	ne 1971	
Per Dwelling		Total	Private House	Home Unit	Other Self- contained Flat	Total (Including Other Private)
1		32 843 73 259 55 754 59 539 40 460 21 585 9 294 7 199	30 047 77 482 58 236 64 046 41 951 20 751 8 275 5 840	6 169 5 252 1 292 486 159 50 14	5 454 7 082 2 400 1 041 376 147 46 23	44 287 91 147 62 570 66 002 42 694 21 063 8 382 5 919
Total .		299 933	306 628	13 430	16 569	342 064
Total inr	nates	1 044 395	1 058 811	23 761	34 262	1 128 249
Average number of inmates per dwe		3.48	3.45	1.77	2.07	3.30

The number of rooms includes kitchen and enclosed sleep-out, but does not include bathroom, toilet, pantry, laundry or storerooms, halls or rooms used only for business purposes. A combined living-dining room or combined kitchen-living or kitchen-dining room was counted as one room.

The largest increase in the five-year period was in five-roomed dwellings. In 1966 five-roomed dwellings were 44.6 per cent of all occupied dwellings; by 1971 this percentage had increased to 46.8. The total increase in private dwellings was approximately 42 100 and 26 400 of these were five-roomed dwellings.

The average number of occupants per occupied private dwelling had fallen progressively from 4.03 in 1933 to 3.65 in 1947 and to 3.49 in 1954. The figures then rose slightly to 3.54 in 1961, fell to 3.48 in 1966, and fell further to 3.30 in 1971.

The following two tables give details of occupied private dwellings by the type of occupancy and material of outer walls respectively.

The number of dwellings owned, or being purchased by instalments, rose by 8.4 per cent between the 1966 and 1971 Censuses. This can be compared with an increase of 19.7 per cent over the same period, in the number of dwellings being rented.

# Occupied Private Dwellings by Nature of Occupancy, South Australia Censuses 1966 and 1971

Nature of Occupancy	30 June 1966		30 Ju	ne 1971	
Nature of Occupancy	Total	Private House	Home Unit	Other Self- contained Flat	Total (Including Other Private)
Owner, purchaser by					
instalments	215 602	226 432	3 418	2 076	233 715
Tenant of Housing					
Trust	27 636	31 477	1 516	1 137	34 174
Tenant of employer	n.a.	9 973	106	323	10 502
Tenant, other	50 719	26 820	7 891	12 128	49 138
Other	4 154	7 856	212	490	9 131
Not stated	1 822	4 070	287	415	5 404
Total	299 933	306 628	13 430	16 569	342 064

At the 1971 Census 61 per cent of all occupied private dwellings had outer walls of brick, as compared with 54 per cent at the 1966 Census. Dwellings of stone walls decreased from 20 per cent of all occupied private dwellings in 1966 to 17 per cent in 1971.

# Occupied Private Dwellings by Material of Outer Walls, South Australia Censuses 1966 and 1971

Material of Outer		30 June 1966		30 Ju	ne 1971	
Walls	uter	Total	Private House	Home Unit	Other Self- contained Flat	Total (Including Other Private)
Tibes somest		161 919 14 414 59 849 18 540 13 789 6 692 23 542 1 188	183 784 18 613 52 927 8 742 13 160 6 244 22 253 905	11 398 554 634 473 76 42 228 25	12 452 330 2 227 805 173 141 412 29	209 231 19 558 56 679 10 154 13 833 7 785 23 128 1 696
Total		299 933	306 628	13 430	16 569	342 064

The proportions of occupied private dwellings that were stated to have gas and/or electricity remained approximately the same (99 per cent) at both censuses. However, the proportion of occupied private dwellings having electricity only increased by 14 per cent from 1966 to 1971.

# Occupied Private Dwellings by Facilities, South Australia Censuses 1966 and 1971

Facilities	30 June 1966		30 Ju	ne 1971	
racinues	Total	Private House	Home Unit	Other Self- contained Flat	Total (Including Other Private)
Gas and electricity Neither gas nor	771 146 943 149 349	281 154 237 150 674	6 4 666 8 679	11 7 652 8 718	570 168 070 170 854
electricity	1 827 1 043	493 943	5 74	3 185	913 1 657
Total	299 933	306 628	13 430	16 569	342 064

At the 1966 and 1971 Censuses each householder was asked to state the number of motor vehicles (excluding motor cycles, scooters and tractors) used by members of that household that were garaged or parked at or near that dwelling on Census night. Data were obtained only for private dwellings.

# Occupied Private Dwellings by Number of Motor Vehicles, South Australia Censuses 1966 and 1971

Niverhau of Vahiolog	30 June 1966		30 Ju	ne 1971	
Number of Vehicles	Total	Private House	Home Unit	Other Self- contained Flat	Total (Including Other Private)
No vehicles	58 264 155 999 58 880 15 197 5 770 5 823	44 264 156 360 75 710 19 038 7 625 3 631	5 786 6 210 976 69 36 353	4 994 9 029 1 718 246 126 456	56 964 173 834 78 907 19 477 7 861 5 021
Total	299 933	306 628	13 430	16 569	342 064

# Unoccupied Dwellings

Unoccupied dwellings include vacant dwellings available for sale or renting, dwellings such as weekenders or holiday homes and seasonal workers quarters which were not occupied on Census night; dwellings normally occupied but whose occupants were temporarily absent on the night of the Census; newly completed dwellings where owners or tenants had not entered into occupation on Census night; dwellings described as 'to be demolished', 'condemned', 'exhibition home', etc.; and buildings constructed as dwellings but used for non-dwelling purposes on the night of the Census,

# Reason for being Unoccupied by Class of Unoccupied Private Dwellings South Australia, Census 1971

	Class of Dwelling						
Reason Unoccupied	Private House	Home Unit	Other Self- contained Flat	Other Private	Total		
For sale To let Newly built Vacant for repair Holiday house Condemned Temporarily vacant Other reasons Not stated	1 900 1 625 1 335 1 296 9 056 1 313 6 686 2 770 572	120 75 147 10 147 5 420 37 21	95 767 312 77 319 36 757 85 56	3 101 2 12 162 17 156 35 26	2 118 2 568 1 796 1 395 9 684 1 371 8 019 2 927 675		
Total	26 553	982	2 504	514	30 553		

## BUILDING

### BUILDING CONTROL

The Building Act, 1923-1965 gave local government authorities power to control building operations within their municipality or district. This power was not automatic but followed a request from a local government authority for all, or a specified portion, of its area to be brought under the Act. The Building Act, 1970-1976 has brought each area of a local government municipality or district within the State under the provisions of the Act. However, a council may petition to the Governor for a proclamation that the Act (or any specified portion of the Act) shall not apply within an area or portion of an area. In areas outside the jurisdiction of the Building Act certain building provisions under the Local Government Act, 1934-1975 apply.

Persons erecting or altering buildings on land coming under the Building Act are required to submit to a building surveyor appointed by the local government authority details and plans of the work envisaged and to receive written approval before commencing operations. Authorities concern themselves with such things as the size and location of buildings, the materials used, the height of ceilings and the provision of ventilation and drainage. They have the power to disapprove building work, subject to a right of appeal. Following the approval of building work, local government inspectors visit the construction site to inspect foundations and may visit the site at other times to check that council requirements are being met.

In addition to administering the general site and structural requirements of the Act, authorities may effect their own by-laws under the Local Government Act, 1934-1975. A by-law may prescribe a higher minimum size for dwelling sites than that provided under the Act or may regulate the positioning of a dwelling on a site. One of the most important by-laws is that of defining particular areas or zones within which the nature of buildings and their use may be restricted. Thus certain areas may be proclaimed residential areas with industrial and commercial premises, beyond those already in existence, prohibited; other areas are designated as industrial zones.

In some local government areas such by-laws have been replaced by regulations under the Planning and Development Act, 1966-1975. During 1971 the Builders Licensing Act, 1967-1974 came into force with provisions for the licensing of builders.

## BUILDING OPERATIONS

Details of building operations in South Australia are compiled from returns collected from all builders of new buildings valued at \$2 000 and over on completion. The statistics relate only to buildings as distinct from other construction activity such as roads, bridges, earthworks and water storage. Alterations and additions of \$10 000 and over to existing buildings other than dwellings are included with new buildings but those to dwellings from 1973-74 are shown as a separate item.

All values shown exclude the value of land and unless otherwise stated represent the anticipated or actual value of buildings upon completion.

# **Building Approvals**

The following table shows the value of new buildings, and alterations and additions valued at \$10 000 and over on completion for which approval was given during 1973-74 and 1974-75. In addition to information on permits issued to private persons and organisations for building in areas subject to building control, particulars have been included of buildings known to be projected or to have started in areas outside building control and details of contracts let or expenditure authorised by government and semi-government authorities.

Building Approvals, South Australia

There are Desirate an		1973-74			1974-75			
Type of Building -	Private	Govt.	Total	Private	Govt.	Total		
				\$'000				
New houses	157 934	13 646	171 579	146 915	20 678	167 593		
New other dwellings	52 788	2 939	<i>55 726</i>	36 438	10 602	47 040		
Alterations and additions to								
dwellings (a)	1 742	13	1 755	5 070	29	5 100		
Hotels, etc	5 678		5 678	10 696	33	10 728		
hops	12 099	<del></del>	12 099	10 411	145	10 557		
actories	13 143	4 892	18 035	12 411	12 381	24 792		
Offices	12 837	15 090	27 928	11 739	5 758	17 498		
Other business premises	11 895	2 377	14 271	12 206	3 503	15 708		
Education	1 720	36 767	38 487	3 714	29 519	33 232		
Religion	614		614	802	_	802		
Health	17 430	12 597	30 027	5 758	16 728	22 485		
Entertainment, recreation	3 854	364	4 218	5 700	1 853	7 553		
Miscellaneous	3 533	10 899	14 433	4 392	2 414	6 806		
Total value of all buildings	295 268	99 581	394 850	266 252	103 643	369 895		

<sup>(</sup>a) Valued at \$10 000 and over.

In using approvals as an indicator of building activity it should be noted that certain projects may be cancelled, delayed or altered and resubmitted for approval, that large projects may be spread over a number of years, and that building costs may vary over the period of construction.

# **Buildings Under Construction**

At the end of 1974-75 new buildings with an anticipated value when completed of \$340 244 000 were in the process of construction, with work done on these buildings valued at \$169 904 000. There were 4 455 houses and 3 187 other dwellings in the course of construction, having an anticipated value when completed of \$131 031 000.

## Value of Work Done

Possibly the best measure of building activity is that of value of work done, *i.e.* of work actually carried out on buildings during the period. Information on the value of work done on owner-built houses is not collected; however, an

estimate based on the value of houses commenced, completed and under construction is calculated and this amounted to \$5.9 million, \$10.6 million and \$14.7 million in the years 1972-73, 1973-74 and 1974-75 respectively.

Buildings: Value of Work Done, South Australia

Type of Building	1970-71	1971-72	1972-73	1973-74	1974-75
New houses (a)	87 683 26 540	93 636 29 813	\$'000 114 476 30 834	135 777 38 093	150 564 49 981
Total new dwellings (a)	114 223	123 449	145 310	173 869	200 544
Alterations and additions to dwellings Hotels, etc. Shops Factories Offices Other business premises Education Religion Health Entertainment, recreation Miscellaneous	4 015 8 365 10 658 11 536 13 814 20 637 977 14 483 2 262	(b) 3 577 2 772 15 365 19 735 17 827 20 447 1 078 12 719 4 247 3 870	(b) 4 689 6 409 17 981 17 630 12 742 23 968 1 008 12 637 8 469 5 561	2 215 4 602 15 269 18 621 19 472 12 110 25 395 646 12 490 6 434 11 447	4 004 3 853 12 105 28 780 31 369 11 137 56 281 1 064 19 803 6 214 8 676
Total new buildings (a)	208 124	225 083	256 402	302 571	383 828

<sup>(</sup>a) Excludes owner-built houses. Before 1973-74 included semi-detached houses and cottage flats; these are now included with 'other dwellings'.

# New Buildings Commenced

A building is recorded as commenced when work on the foundation has begun. In the table below commencements during 1973-74 and 1974-75 have been classified according to ownership at the date of commencement. Almost all houses recorded under the 'government' heading were being built for the South Australian Housing Trust, many of them being intended for sale on completion.

New Buildings Commenced, South Australia

The second state of		1973-74			1974-75			
Type of Building	Private	Govt.	Total	Private	Govt.	Total		
			\$'00	0 (a)				
New houses	145 972	10 272	156 245	140 774	20 362	161 136		
New other dwellings	40 727	3 309	44 036	36 772	11 309	48 081		
Alterations and additions to								
dwellings (b)	2 554	72	2 625	4 117	117	4 236		
Hotels, etc	4 322	17	4 339	2 608	718	3 325		
Shops	16 959	12	16 971	6 089	448	6 538		
Factories	18 337	1 751	20 088	18 240	5 346	23 586		
Offices	11 933	9 632	21 565	17 861	14 836	32 697		
Other business premises	9 923	2 654	12 576	6 877	3 680	10 557		
Education	2 900	46 652	49 551	4 326	29 015	33 341		
Religion	493		493	1 070		1 070		
Health	6 933	10 353	17 289	13 591	11 874	25 466		
Entertainment, recreation	3 407	605	4 012	7 472	2 637	10 110		
Miscellaneous	4 795	4 609	9 403	2 403	2 046	4 448		
Total value of new buildings	269 254	89 937	359 192	262 198	102 388	364 586		

<sup>(</sup>a) Anticipated completion value.

<sup>(</sup>b) Before 1973-74 alterations and additions to dwellings valued at \$10 000 and over were included with new dwellings.

<sup>(</sup>b) Valued at \$10 000 and over.

# New Buildings Completed

Details of new buildings completed for the years 1970-71 to 1974-75 are given in the next table. A building is regarded as having been completed when the contractor has fulfilled the terms of the contract or in the case of an owner-built house when the dwelling is either completed or occupied, whichever occurs first. However, the value in all cases is that of the building as a finished product.

# New Buildings Completed, South Australia

Year Number of Dwellings			Value of New Buildings					
rear ·	Houses (a)	Other Dwellings	Houses (a)	Other Dwellings	Alterations and Additions to Dwellings	Other	Total	
					\$'000			
1970-71 1971-72 1972-73	9 061	4 000 4 184 4 217	84 639 97 834 110 357	26 001 27 411 30 333	(b) (b) (b)	90 256 89 792 114 702	200 895 215 036 255 394	
1973-74 1974-75		3 955 3 802	131 839 166 744	35 644 44 916	1 748 3 618	103 067 152 123	272 296 367 403	

<sup>(</sup>a) Before 1973-74 included semi-detached houses and cottage flats; these are now included with 'other dwellings'.

The following table gives further details of dwellings completed over the five years to 1974-75.

# Number of New Dwellings Completed, South Australia(a)

Type of Dwelling	1970-71	1971-72	1972-73	1973-74	1974-75
Private:					
Contract-built houses $(b)$ Owner-built houses $(c)$	6 011 342	6 635 321	7 117 413	7 540 587	7 245 638
Total houses (b) Other dwellings	6 353 3 755	6 956 4 114	7 530 4 039	8 127 3 460	7 883 3 303
Total private dwellings	10 108	11 070	11 569	11 587	11 186
Government:  Houses (b)  Other dwellings	1 955 245	2 105 70	1 447 178	825 495	1 188 499
Total government dwellings	2 200	2 175	1 625	1 320	1 687
Total all dwellings	12 308	13 245	13 194	12 907	12 873

<sup>(</sup>a) Before 1973-74 alterations and additions to dwellings valued at \$10 000 or over were included with new dwellings.

<sup>(</sup>b) Before 1973-74 alterations and additions to dwellings valued at \$10 000 and over were included with new dwellings.

<sup>(</sup>b) Before 1973-74 included semi-detached houses and cottage flats; these are now included with 'other dwellings'.

<sup>(</sup>c) Owner-built houses are houses erected without services of contractor for whole job.

The value of buildings, other than dwellings, completed over the same period is shown below. Included under 'other business premises' are service-stations, warehouses and communication buildings and under 'miscellaneous' are defence establishments, buildings for law and order and certain institutional premises.

Value of New Buildings Other Than Dwellings Completed, South Australia

Type of Building	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Hotels, etc	4 093	3 246	3 779	4 682	5 085
Shops		2 334	4 633	13 930	10 967
Factories	40 734	17 889	12 529	20 603	21 684
Offices	12 170	16 800	14 118	12 484	25 824
Other business premises		8 772	25 996	11 497	9 323
Education	10 477	22 144	23 570	17 810	33 514
Religion	906	1 153	897	752	758
Health	0.164	11 663	16 808	10 191	22 442
Entertainment, recreation	1 532	2 178	8 767	3 114	9 889
Miscellaneous	0.065	3 618	3 605	8 004	12 639
Total	90 256	89 792	114 702	103 067	152 123

## New Houses-Material of Outer Walls

A plentiful supply of clay and building stone together with a paucity of suitable timbers in South Australia has resulted in most houses being built of solid construction rather than brick veneer or other construction. In the table below new houses are classified according to the materials used in the outer walls.

New Houses: Material of Outer Walls, South Australia(a)

V		Brick, C Sto		Brick Veneer and Stone Veneer		Asbestos-Cement		Other		
	Year		Number	Value	Number	Value	Number	Value	Number	Value
				\$'000		\$'000		\$'000		\$'000
						COMM	ENCED			
970-71			4 874	55 828	3 160	28 325	682	5 012	53	394
971-72			4 930	63 300	3 090	30 268	805	6 021	.59	558
972-73			5 796	83 412	3 610	42 101	812	6 706	101	928
973-74			4 905	89 396	3 723	55 737	936	9 307	159	1 805
974-75	•• ••		3 273	78 696	3 479	61 651	1 467	19 210	101	1 579
						COMP	LETED			
970-71			4 760	54 124	2 841	25 229	647	4 757	60	523
971-72			4 927	60 659	3 272	30 619	806	6 004	56	554
1972-73			5 064	68 956	3 060	34 345	756	6 180	97	876
973-74			4 747	77 858	3 145	43 542	915	8 859	145	1 578
974-75			4 116	87 994	3 633	61 377	1 224	15 844	98	1 53

<sup>(</sup>a) Before 1973-74 included semi-detached houses and cottage flats, and alterations and additions valued at \$10,000 and over.

In 1974-75 brick veneer houses constituted 42 per cent of commencements. Although the larger proportion of brick veneer houses are built by the South Australian Housing Trust a wider acceptance of this type of construction is indicated by the increasing number being erected by private contractors.

# Location of New Dwellings

In recent years the greatest development has occurred in the local government areas of Noarlunga, Salisbury and Tea Tree Gully; during the five years 1970-71 to 1974-75, new dwellings in these areas accounted for almost 30 per cent of the total State completions. Of the country local government areas Whyalla has recorded the greatest number of completions each year from 1959.

Location of New Dwellings Completed, South Australia(a)

Local Government Area	1970-71	1971-72	1972-73	1973-74	1974-75
Brighton (C)	150 272	185 302	204 365	159 393	78 363
Campbelltown (C)	364	452	546	365	386
Elizabeth (C)	186	276	181	257	175
Enfield (C)	388	615	614	559	397
Glenelg (C)	377	312	284	130	63
Henley and Grange (C)	190	253	279	139	146
Marion (C)	481	488	552	487	520
Meadows (DC)	287 58	356 63	391 47	504 46	534 57
Millicent (DC)	719	732	650	589	427
Mount Gambier (C)	96	120	186	223	186
Munno Para (DC)	142	98	103	129	336
Murray Bridge (M)	61	92	93	70	115
Noarlunga (DC)	1 203	1 142	1 103	1 201	1 271
Payneham (C)	235	214	170	263	150
Port Adelaide (C)	161	191	243	217	157
Port Augusta (C)	152	186	121	108	113
Port Lincoln (C)	89	91	63	. 94	79
Salisbury (C)	1 288	1 478	1 597	1 373	1 288
Stirling (DC)	92	140	156	162	215
Tea Tree Gully (C)	1 162	1 305	1 354	1 367	1 083
Unley (C)	340 635	251 505	207 515	174 234	312 259
West Torrens (C)	384	303 391	363	234 246	278
Wnyalia (C)	658	763	661	652	835
Other $(b)$	2 151	2 260	2 162	2 787	3 063
Total State	12 321	13 261	13 210	12 928	12 886

<sup>(</sup>a) Dwelling units comprise houses and other dwellings plus dwellings attached to other new buildings. Before 1973-74 alterations and additions to dwellings valued at \$10 000 and over were included with new dwellings.

<sup>(</sup>b) Includes Unincorporated Areas.

<sup>(</sup>C) Municipality with city status (M) Municipality

<sup>(</sup>DC) District Council

# **Building Employment**

Details of building employment in South Australia are given in the next table. The figures are an average of the number of persons employed on four days in the year, namely at the end of March, June and September and in mid-December. They include all contractors and sub-contractors, and employees of contractors, sub-contractors and government instrumentalities, who on these four days were engaged on the construction, alteration, repair and maintenance of buildings, but exclude persons working on owner-built houses or for contractors or sub-contractors who undertake only alterations, additions, repairs and maintenance. Persons 'actually engaged' include those temporarily laid off because of weather. Some duplications may occur as a result of frequent movement between jobs or because some persons (such as electricians) may work on several buildings which are under construction simultaneously.

The average employment figure of 14 325 for 1974-75 was made up of 7 146 persons working on new dwellings, 4 465 working on other new buildings and 2 714 employed on additions, alterations, repairs and maintenance.

	, Employ				
Classification	1970-71	1971-72	1972-73	1973-74	1974-75
		I	Persons En	GAGED	
Occupational status:					
Contractors	582	575	664	767	963
Sub-contractors	3 767	3 823	4 226	4 447	3 806
Wage-earners	9 494	9 996	10 411	11 026	9 557
Trade:					
Carpenters	3 339	3 364	3 592	3 843	3 660
Bricklayers	2 240	2 249	2 449	2 620	2 176
Painters	1 260	1 258	1 322	1 365	1 219
Electricians	904	942	1 003	1 106	994
Plumbers	1 265	1 261	1 382	1 523	1 306
Builders labourers	1 661	1 856	2 096	2 202	1 935
Other	3 173	3 464	3 458	3 581	3 037
Other	31/3	3 404	3 430	2 201	3 037
Total	13 842	14 394	15 302	16 239	14 325

Building Employment, South Australia

## THE SOUTH AUSTRALIAN HOUSING TRUST

The South Australian Housing Trust which was constituted by Act of Parliament in 1936 provides houses and flats for rental and houses for sale.

## Rental Dwellings

When the South Australian Housing Trust commenced operations in 1937 it undertook, in the words of its first Annual Report, 'the provision of accommodation necessary for decent living at low rentals for persons coming within the lower income group.' The enabling legislation confined the Trust's activities for many years to the building and letting of double-unit attached houses. Subsequent legislation provided for the construction of single unit houses for

rental and an eventual removal of statutory limitations on the capital cost of houses permitted the construction of larger single-unit houses. At 30 June 1975 the Trust had completed 36 173 dwellings for rental.

In 1952 Trust rental accommodation was expanded with the construction of the first flats for single persons and for married couples without young children. Originally only two-storey flat developments were built; since 1953, however, three-storey flats and single-storey villa flats have also been constructed. At 30 June 1975 the Trust had built 2 231 flat units, of which 2 172 were for rental. In 1954 construction of small groups of cottage flats for elderly persons began on five sites in the metropolitan area. At 30 June 1975, 2 524 of these units had been built; 867 for charitable organisations and 1 657 for rental by the Trust.

# **Dwellings for Sale**

Since the inception of its program of building houses for sale in 1946, the Trust has greatly expanded its operations in this area. Under the original scheme, purchasers were required to provide their own finance, either from a lending institution or from their own resources. Since 1952, however, the Trust has been able to advance money on second mortgage. During the year ended 30 June 1975, 513 houses were completed and sold throughout the State under the bank finance sales scheme.

In addition, under the rental-purchase scheme established in 1962, houses are made available for a minimum deposit of \$100 under an agreement to purchase. At the end of June 1975, 7 066 houses had been sold under these agreements.

The Trust provides a variety of sizes and designs for sale houses, depending on cost, location, and availability of building materials. Houses are provided for primary producers on their own land and for employees of State Government departments at the request of the departments concerned.

Details of dwellings completed by the Trust since its inception, both for rent and for sale, are given in the following table.

South Australian Housing Trust, Number of Dwellings Completed	South	Australian	Housing	Trust.	Number	of	Dwellings	Completed (a
---	-------	------------	---------	--------	--------	----	-----------	--------------

Period -		Dwel	llings		Rural Dwellings - including	Total
renod -	Single Units	Double Units (b)	Cottage Flats	Other	Soldier Settlers	
1937-1970	36 699	(c)24 365	1 725	1 521	1 234	65 544
1970-71	- 1 371	420	177	245		2 213
1971-72	1 396	498	239	68		2 201
1972-73	869	417	158	174	_	1 618
1973-74	812	281	104	142		1 339
1974-75	1 118	269	121	81		1 589
Total	42 265	26 250	2 524	2 231	1 234	74 504

<sup>(</sup>a) Excludes emergency and temporary dwellings.

<sup>(</sup>b) Number of individual dwelling units.

<sup>(</sup>c) Includes a small number of triple-units.

The Trust's early activities concentrated on the provision of rental and sales dwellings in small groups. The expansion of its activities has led the Trust into the more complex areas of town planning and urban development. At Elizabeth, 27 kilometres north of Adelaide, a comprehensive development including a wide range of houses for sale and houses and flats for rent has grown into a city, complete with commercial and industrial areas. There are also several other areas throughout the State where the Trust is helping to provide housing in close proximity to employment.

Most of the funds used to finance the building operations of the Trust are borrowed either from the State Government under the Housing Agreement or from semi-government borrowings arranged in conjunction with the State Treasury. Details of funds employed, and of the revenue and expenditure of the Trust in recent years are given in Part 11.4 Public Finance.

## Special Rental Houses

Under the terms of the *Housing Agreement Act* 1973, advances may be used to purchase and renovate older houses in order that they can be let to needy families. This scheme has enabled the Trust to increase its stock of rental houses especially in the City of Adelaide, and inner urban and industrialised areas where it cannot build new houses because of the lack of vacant land. To 30 June 1975 the Trust had purchased a total of 579 of these dwellings.

# HOUSING AGREEMENTS

In July 1953 the South Australian Government became party to an agreement already existing between Australian and certain other State Governments under which the Australian Government made substantial loans to the States for the provision of housing. The initial agreement was renewed in 1956, 1961 and again in 1966 for a further five years.

Under the Housing Agreement the Australian Government made advances to the State for the erection of dwellings by the South Australian Housing Trust and for the provision of finance for home builders by means of loans, through the Home Builders Fund, to the State Bank and certain building societies. At least 30 per cent of the funds provided had to be channelled through the Home Builders Fund.

The Housing Agreement was terminated on 30 June 1971 and new legislation, the States Grants (Housing) Act 1971, operated from 1 July 1971. Advances made pursuant to the terminated Agreements are repayable with interest by the States over fifty-three years.

From 1 July 1971, the States were responsible for financing their housing programs from Loan allocations but, under the new legislation, received Australian Government assistance by way of grants towards the debt charges involved. In terms of the States Grants (Housing) Act 1971 which prescribed the arrangements and conditions, South Australia was to receive grants of \$14 107 500 in respect of each of the five years from 1971-72 to 1975-76, payable over a period of thirty years. However, because of new arrangements (Housing

Agreements Act 1973) effective from 1 July 1973, this State only received the grants of \$14 107 500 in respect of each of the years 1971-72 and 1972-73.

Under arrangements discussed and agreed to at the June 1973 Premiers' Conference the Australian Government entered into an agreement with each State, under which the States will receive advances for welfare housing purposes during the five years 1973-74 to 1977-78; these advances are to be outside, and in addition to the State Loan Council programs. The Housing Agreements Act 1973 was passed by Parliament in the autumn session of 1973. Advances made under the Agreement will be repaid, with interest, over fifty-three years. During 1974-75 the Australian Government advanced to the State \$56 360 000 in accordance with the Agreement. Advances totalling \$56 360 000 will be made available in 1975-76. Because of the re-introduction of a direct interest concession, the States Grants (Housing) Act 1971 was amended by the States Grants (Housing) Act 1973.

# Advances for Housing, South Australia

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
A days 6 (-)			\$'000		
Advances for year (a): Housing Trust Home builders accounts	11 750 13 250	13 100 14 600	14 500 15 500	15 500 17 250	33 560 22 800
Total	25 000	27 700	30 000	32 750	56 360
Liability at end of year (b):  Housing Trust  Home builders accounts	147 505 114 932	146 282 114 170	145 555 113 375	159 732 129 796	191 959 151 648
Total	262 437	260 451	258 929	289 528	343 607

<sup>(</sup>a) Advances in 1971-72 and 1972-73 are allocations included under the States' Loan Council borrowing program; advances for other years are made under Housing Agreements.

# DEPARTMENT OF ENVIRONMENT, HOUSING AND COMMUNITY DEVELOPMENT

# Home Savings Grant Scheme

Under the Australian Government's Home Savings Grant Scheme introduced in 1964, married, widowed and divorced persons under 36 years of age, who have lived and saved in Australia for at least three years, may become eligible for a grant of \$750 to assist them in obtaining their first home. To be eligible for the maximum grant applicants must have saved \$2 250 or more in an acceptable form before entering into a contract for the purchase or construction of a dwelling or, if an owner/builder, before commencing construction. Persons who have saved less than \$2 250 may qualify for a reduced grant. Money already expended on the purchase of land or on the purchase or construction of a dwelling may be included in acceptable savings. An application for a grant

<sup>(</sup>b) Under Housing Agreements only.

must be lodged not longer than twelve months after signing a contract (or commencing to build if an owner/builder) although, in special circumstances, an application lodged after twelve months may be considered.

A total of 37 647 Home Savings Grants had been approved in South Australia at 30 June 1975 representing a total payment of \$17 805 462.

The Government has recently announced that a new and improved scheme will operate from 1 January 1977 subject to the necessary legislation being passed by the Parliament.

# **Migrant Flats Scheme**

The Department has fifty fully furnished self-contained flats in the southern suburbs of Adelaide to provide transitory accommodation of up to six months for selected newly arrived migrant families who have been sponsored under the Australian Government Immigration Scheme.

### **Defence Service Homes Scheme**

The Defence Service Homes Scheme is at present being administered by the Australian Housing Corporation which is a statutory authority.

The scheme originated in the War Service Homes Commission which was set up in 1919 to help provide homes for ex-servicemen and their dependants. Persons currently eligible for assistance include ex-servicemen and women of the Australian Forces and Nursing Services who were enlisted or appointed for or employed on active service outside Australia in the 1914-18 War, the 1939-45 War, in Korea, Malaya or Vietnam, or in any other areas as specified from time to time by the Australian Government. In addition, National Servicemen and Permanent Members of the Force may be eligible if their period of service did not cease before 7 December 1972.

Defence	Service	Hamac	Schama	South	Australia

Year	Activities I	Ouring Year	Advances Outstanding at End of Year	
	Homes Provided	Capital Advanced	Number	Amount
		\$'000		\$'000
969-70	509	4 100	16 693	76 405
1970-71	537	4 380	16 719	77 248
1971-72	669	6 060	16 801	79 389
1972-73	685	6 208	16 618	80 504
1973-74	804	10 580	16 747	84 354
1974-75	853	12 000	16 909	91 042

Also eligible are certain other ex-service personnel who served in British Forces and who were resident in Australia before enlistment, and certain members of the Mercantile Marine Services. Assistance may also be granted to the widow or in some cases to the widowed mother of an eligible person,

and to a representative of an approved welfare organisation who, subject to certain conditions, served outside Australia on or after 3 September 1939 with a body, contingent or detachment of the Australian Forces.

Assistance is given for building a home, in purchasing a new or existing home, or in discharging a mortgage which has been arranged with the prior approval of the Branch. In certain circumstances a person who has not received the maximum loan may receive a further loan to undertake certain additions. The maximum loan available at 30 June 1975 was \$15 000 and the interest rate is  $3\frac{3}{4}$  per cent for the first \$12 000 lent and  $7\frac{1}{4}$  per cent on the balance of loan above \$12 000.

## OTHER HOME FINANCE SOURCES

The State Bank of South Australia advances funds provided by the State Government under the Advances for Homes Act, 1928-1972, funds provided from the Home Builders Fund, and its own funds. The Savings Bank of South Australia advances its own funds either as Homes Act loans guaranteed by the State Treasurer or on its own terms. Homes Act loans are also arranged by the South Australian Superannuation Department, in addition to loans on its own terms. The Commonwealth Savings Bank and the private savings banks make long-term housing advances.

Maximum loans available from the above institutions varied with differing rates for new and existing houses and for solid and timber frame construction.

Life assurance companies make housing loans which are normally collaterally secured by a life assurance policy. Maximum loan limits vary considerably between companies but in general are higher than those offered by the banks. Another source of housing finance is the building societies, details of which are given in Part 12.3 Other Private Finance.

#### Housing Loans Insurance Corporation

The Housing Loans Insurance Corporation was established by the Housing Loans Insurance Act 1965 to administer the Australian Government's Housing Loans Insurance Scheme under which approved lenders may be insured against losses arising from the making of housing loans. The Corporation consists of a Chairman (who is also Managing Director) and a Deputy Chairman, who are full-time members, and three part-time members, all of whom are appointed by the Governor-General.

The main purpose of the Housing Loans Insurance Scheme is to assist people to borrow as a single loan, at a reasonable rate of interest, the money they need and can afford to re-pay to obtain a home suited to their requirements.

To encourage lenders to make high ratio loans, the Corporation may insure a loan of up to \$40 000. The maximum loan to valuation ratio is 95 per cent where the security is a house or a unit. For loans in respect to two units of accommodation, the maximum is 90 per cent.

A once and for all premium is charged by the Corporation at the time the loan is made. The premium is payable by the borrower but lenders may agree to add it to the amount of the loan for repayment by the borrower over

the period of the loan. On loans comprising 94 per cent and 95 per cent of the valuation of a home the premium is 1.4 per cent of the amount of the loan. On loans less than 94 per cent of valuation, the premium falls progressively down to 0.25 per cent on loans of less than 76 per cent of valuation.

The Corporation will insure a loan made to enable a borrower who is to occupy the dwelling to buy or build a house, to buy a home unit, or to discharge an existing mortgage. A loan for a dwelling consisting of two units of accommodation is insurable if one of the units is to be occupied by the borrower. Loans for alterations and extensions and loans to meet expenses of providing or improving lighting, sewerage, drainage, fences, roads, etc. are also insurable. In addition to loans secured by a registered first mortgage, there is provision for the insurance of second mortgage loans and cover is available for either full term, fixed term or five year loans.

An insured loan may be made only by an approved lender. Approved lenders are appointed by the Corporation from within approved classes of lenders specified by the Australian Minister for Housing. Approved classes include banks, building societies, friendly societies, mortgage management companies, solicitors, credit unions and trustees of superannuation funds.

During 1974-75, 1 590 loans for \$26 185 000 were insured in South Australia. Comparable figures for 1973-74 were 2 741 loans for \$38 620 000.

PART 9

# **PRODUCTION**

# 9.1 RURAL INDUSTRIES

Two-thirds of the area of the State, from the northern boundary down to latitude 32°S, is mainly desert and unsuitable for agriculture. The rainfall is low and erratic, coming mainly from thunderstorms, and averages less than 200 millimetres a year. High day temperatures during a large part of the year cause a very high rate of evaporation.

South of latitude 32°S is an area where the rainfall is more regular and higher; this land, mostly semi-arid, is transitional between the desert and the agricultural regions. Small areas are planted to cereals and extensive areas, adjacent to the River Murray and irrigated from the waters of the river, are devoted to horticulture and viticulture.

A third region extending as far as latitude 36°S enjoys an average annual rainfall varying according to locality between 250 and 1 250 millimetres a year and has a reliable growing season of five months or more. This is the main agricultural region of the State and is devoted to ley farming, producing wheat, barley, oats, fruit and vegetables and carrying sheep and cattle.

The south-eastern part of the State has a rainfall in excess of 500 millimetres a year but the physiography is not congenial to agriculture, most of the usable area being devoted to grazing and afforestation.

Cereal crops (of which wheat is the most important) are sown following opening rains, which are normally expected in April or May. The growing

season varies between districts, but generally can be considered as the eight months April to November, and good rains during this period are vital to the success of the season's harvest.

#### Rural Statistics

Most rural statistics are prepared from the annual Agricultural Census in which returns are collected from every holding of one hectare or more, used for the production of agricultural products or the raising of livestock (including poultry) and the production of livestock products. Particulars relate to rural operations for one complete year ended 31 March but where harvesting of some crops (mainly fruit) has not been completed by that date, returns are collected shortly afterwards.

An owner or occupier who works more than one holding is normally required to report details for each holding. However, where the holdings are near to one another and are in effect worked as one farm, a composite return is obtained, and is treated as covering a single holding in the district in which the main farm is situated.

The number and area of holdings in each statistical division for the past two years are shown in the following table.

Rural	Holdings	Statistical	Divisions	South	Australia
Kurai	rioiumgs,	Statistical	DIVISIONS,	South	Austrana

Statistical Division –	Hold	lings	Area of Holdings		
Statistical Division –	1973-74	1974-75	1973-74	1974-75	
	Nun	nber	'000 hectares		
Adelaide	4 250	3 972	97	91	
Central	3 098	3 096	1 282	1 272	
Kangaroo Island	456	450	315	309	
Mount Lofty Ranges	5 660	5 772	770	756	
Murray	5 914	5 786	2 981	2 953	
South East	4 445	4 336	2 278	2 194	
Eyre	2 312	2 265	3 875	3 910	
Northern	2 293	2 206	2 963	2 953	
Far North	310	302	50 282	49 388	
Total	28 738	28 185	64 843	63 825	

A classification of holdings by type of main activity was undertaken for the year ended 31 March 1974 based on estimates of gross receipts of each activity. Values were allocated to areas of crops and livestock numbers reported on the returns submitted for the year.

The following table gives a summary of the type of activity carried out on rural holdings in each statistical division.

Rural Holdings: Classified by Type of Activity, South Australia, 1973-74

Type of Activity (a)			Statistica	1 Division			- Total	
Type of Activity (a)	Adelaide	Central	Mount Lofty Ranges	Murray	South East	Еуге	(b)	
Commercial holdings:	Number of Holdings							
Sheep—cereal grain Sheep Cereal grain Cattle (meat production) Cattle (milk production) Vineyards Fruit (other than vine)	18 57	1 221 22 950 12 49 7 8	472 438 89 307 1 027 477 245	1 337 146 378 75 327 967 1 083	259 1 249 26 945 457 23 5	1 291 84 586 24 6	5 612 2 761 2 382 1 533 2 024 1 657 1 677	
Vegetables; Potatoes Other and mixed Poultry Pigs Other Multi-purpose	27 750 73 31 73 34	10 74 35 44 4 135	79 35 60 56 18 333	5 233 79 56 8 288	31 52 11 52 22 319	$\frac{1}{25}$	153 1 187 271 289 129 1 305	
Total classified	928	2 571 250 277	3 636 1 211 813	4 982 414 518	3 451 539 455	2 076 85 151	20 980 3 672 4 086	
Total holdings	4 250	3 098	5 660	5 914	4 445	2 312	28 738	

<sup>(</sup>a) Estimated gross receipts of specified activity greater than 50 per cent of total estimated gross receipts.

(b) Includes Kangaroo Island, Northern and Far North Divisions.

# Rural Employment

In the following table particulars are given of permanent and temporary rural employment during the last five years. The figures include male and female workers. Females engaged mainly in domestic duties are excluded from the table.

Rural Employment, South Australia At 31 March

Particulars	1971	1972	1973	1974	1975
Permanent workers:			Persons		
Owners, lessees, etc	316	21 405 141 6 161	21 454 103 5 983	21 124 109 5 772	21 208 90 5 660
Total		27 707 12 637	27 540 13 271	27 005 12 260	26 958 12 018
Total workers	42 670	40 344	40 811	39 265	38 976

#### Farm Machinery

Particulars of farm machinery on rural holdings in South Australia for each of the last five years, and in each statistical division at 31 March 1975 are given in the next two tables.

# Farm Machinery on Rural Holdings, South Australia At 31 March

Type of Machine	1971	1972	1973	1974	1975
		17/2			
Shearing machines:					
Machines Stands	15 852 30 205	n.a. 29 586	n.a. n.a.	n.a. n.a.	n.a. 24 580
Milking machines:					
Machines Units	5 571 17 082	<i>n.a.</i> 16 261	n.a. 15 834	n.a. n.a.	n.a. n.a.
Rotary hoes and rotary tillers	5 442	6 005	6 239	6 484	6 446
Tractors:					
Wheeled	33 971 3 052	34 223 2 974	34 370 2 888	34 749 2 839	35 524 2 831
Grain drills:					
Combine Other	15 100 4 804	15 355 4 485	15 408 4 148	15 232 4 084	15 218 4 010
Fertiliser distributors .	9 667	9 816	9 863	10 007	10 021
Harvesters, headers and strippers	11 208	11 385	11 090	11 013	10 999
Forage harvesters	814	856	877	892	872
Pick-up balers	5 404	5 582	5 624	5 829	5 878

# Farm Machinery on Rural Holdings: Statistical Divisions, South Australia At 31 March 1975

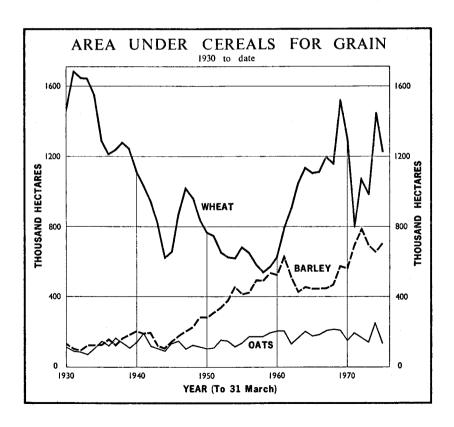
Time of Markins	Statistical Division								
Type of Machine	Adelaide	Central	Mount Lofty Murray Ranges		South East Eyre		Northern	Total (a)	
Rotary hoes and rotary									
tillers	1 454	480	1 381	1 747	590	388	326	6 446	
Tractors:									
Wheeled	2 457	4 697	5 991	8 136	5 222	5 123	2 869	35 524	
Crawler	307	189	422	379	504	581	209	2 831	
Grain drills:									
Combine	287	2 966	1 882	3 072	1 681	3 205	1 839	15 218	
Other	92	411	656	821	844	889	148	4 010	
Fertiliser distributors	835	850	2 544	1 853	1 973	1 178	409	10 021	
Harvesters, headers and									
strippers	150	2 358	1 131	2 277	1 052	2 399	1 361	10 999	
Forage harvesters	55	80	248	181	207	62	26	872	
Pick-up balers	141	975	1 158	971	1 333	595	550	5 878	

<sup>(</sup>a) Includes Kangaroo Island and Far North Divisions.

#### **AGRICULTURE**

Most of the land area of South Australia is arid or semi-arid and cannot be used for agricultural production. This severe natural limitation means that even with modern farming methods only 6 million of 64 million hectares in rural holdings are devoted to cropping or permanent improved pasture. The area under crop in recent years has varied between 2·0 and 2·5 million hectares most of which is planted to cereals for the production of grain, hay and forage. About 57 000 hectares are used for the production of fruit and vegetables.

The cereals—wheat, barley and oats—sown for grain account for about 90 per cent of the total area cropped in South Australia. In addition to hay and green forage the remainder of the area is devoted mainly to orchards, vineyards and vegetable production. Climatic conditions, particularly the relatively low winter rainfall and the dry hot summer, favour cereal growing; one advantage being the low incidence of stem rust, a serious disease in the moister areas of the Australian wheat belt.



The area sown to the more important crops during the last five seasons is given in the following table.

Area Sown to Principal Crops, South Australia

Crop	1970-71	1971-72	1972-73	1973-74	1974-75
Cereals for grain:		'(	000 hectares		
WheatBarley Oats Rye	802·3 693·5 194·9 19·7	1 068·6 783·7 168·9 19·6	986·1 692·1 141·5 15·2	1 431·9 627·3 152·2 17·2	1 220·4 700·7 134·9 10·2
Crops for hay: Oaten Other	51·8 32·6	52·7 25·0	52·6 36·5	56·4 23·9	35·0 15·9
Crops for green forage	128.3	84.8	88.2	71.1	59.4
Vegetables: Potatoes	2·9 0·5 5·9	2·8 0·5 7·1	2·7 0·5 7·9	2·5 0·5 6·4	2·7 0·6 6·9
Fruit: Orchards Vineyards	18·3 27·7	17·2 28·8	16·7 29·5	16·9 29·6	16·6 30·4
Other crops	15.5	18.3	14.9	15.3	23.6
Total area of crops	1 993-9	2 278.0	2 084-4	2 451.2	2 257-2

The extent of fluctuations since 1930 in the area under the three main cereal crops is illustrated by the graph on page 418.

## IRRIGATED CULTURE

The following table shows the approximate area of all irrigated culture in South Australia for the seasons 1970-71 to 1974-75. Of the areas shown below, about 60 per cent of both orchards and vineyards and about 15 per cent of green forage and pastures are in the River Murray irrigation areas listed in the table on page 420. The area cut for green forage and silage is shown as green forage.

Area Under Irrigated Culture, South Australia(a)

	Season			Orchards	Vineyards	Vegetables	Green Forage	Other Crops	Pasture	Total
							Hectares			
1970-71 1971-72 1972-73 1973-74 1974-75		• •	::	13 793 12 969 13 126 13 211 13 263	15 374 15 843 17 160 16 973 17 987	6 454 6 375 6 248 5 599 5 888	1 677 (b) (b) (b) (b)	12 197 (c) 977 (c) 2 028 (c) 1 434 (c) 2 396	27 720 (c) 39 914 (c) 44 586 (c) 42 960 (c) 39 414	77 215 76 078 83 148 80 177 78 948

<sup>(</sup>a) Approximations only. (b) Not collected separately. (c) Before 1972 lucerne, clovers and grasses cut for hay or harvested for seed were shown in 'other crops'.

The most important irrigation areas are those located in the Murray Valley. A description of the development and types of irrigation schemes along the River Murray is given in Part 8.2. The remainder of the areas under irrigation are located mainly in the Mount Lofty Ranges and South East Divisions.

The main crops in the Upper Murray irrigation areas are grapes, citrus fruit and stone fruit while the reclaimed swamp areas of the Lower Murray irrigation areas are used mainly for green forage and pastures.

River Murray Irrigation Areas: Area of Pasture and Area and Production of Vineyards and Orchards 1974-75(a)

		Aı	ea			Prod	uction	
•	Vineyards				Viney	ards	Orci	ards
Irrigation Area	Pasture (b)	Bearing	Not Bearing	Orchards	Total Grapes Produced	Grapes Used for Wine	Oranges	Peaches
		Hec	tares			To	nnes	
Upper Murray:								
Berri Cadeli Cobdogia Cooltong Holder Loveday Loxton Moorook Nookamka Ral Ral Renmark Sunlands Waikerie Other	62 7 54 62 21 94 5 7 132 373 20 10	1 929 163 492 216 116 874 1 571 168 644 273 1 960 53 625 371	174 5 44 10 14 41 70 14 33 33 182 2 78 48	1 183 162 18 299 125 137 1 182 205 59 118 1 339 591 906 888	29 172 1 274 9 204 4 829 2 210 16 816 30 941 2 578 11 253 3 205 24 768 879 11 282 5 764	25 956 945 8 544 4 464 2 169 15 306 28 523 2 413 10 221 2 264 19 477 879 10 818 4 918	10 863 1 343 127 6 131 1 642 1 690 21 482 2 547 729 107 9 011 18 986 12 574 10 618	2 610 72 3 168 52 43 1 383 1 64 2 815 6 578 43 2 577 2 907
Total	847	9 455	748	7 212	154 175	136 897	97 850	17 439
Lower Murray:								
Cowirra Jervois Monteith Mypolonga Necta Pompoota Other	211 1 988 477 689 317 482 745	1 		-4 340 -			- 8 4 156 - -	- 691 -
Total	4 909	1		344			4 164	691

<sup>(</sup>a) Excludes areas and yields of crops grown by irrigation on the River Murray and elsewhere not in the above irrigation areas.

#### **FERTILISERS**

Nearly all soils in the agricultural areas of South Australia are deficient in phosphoric acid, and superphosphate is used on both crops and pastures in large quantities to overcome this deficiency. In some areas trace elements

<sup>(</sup>b) Includes non-irrigated pastures.

(manganese, copper, zinc and molybdenum) are added to the superphosphate to rectify the chronic shortage of these elements.

A summary of the area of crops and pastures treated and the quantities of fertiliser used in 1974 is shown in the following table.

Principal Crops and Pasture Fertilised, South Australia
1974

Type of Crop	Area Fertilised	Super- phosphate	Other	Total	Per Hectare
	'000 hectares		Tonnes		kg
Wheat Barley, oats and rye Vegetables Fruit trees and vines Other and unspecified crops	816 8 27	144 627 108 592 4 089 10 132 2 560	7 165 6 705 6 044 9 269 255	151 792 115 297 10 133 19 401 2 815	135·49 141·34 1 336·28 710·50 188·31
Total crops	1 986 2 138	270 000 314 257	29 438 8 497	299 438 322 754	150-78 151-00
Total	4 123	584 257	37 935	622 192	150-89

The following table shows the area of crops and pastures treated and the quantity of fertiliser used in each division in 1974.

Use of Artificial Fertilisers: Statistical Divisions, South Australia
1974

		Cre	ops	Pastures			
Statistical Division	Area Fertilised	Proportion of Total Area Cropped	Fertiliser Used	Fertiliser Used per Hectare	Area Fertilised	Fertiliser Used	Fertiliser Used per Hectare
	'000 ha	Per cent	Tonnes	kg	'000 ha	Tonnes	kg
Adelaide	11	63-24	7 291	646-14	16	2 888	180-68
Central	447	91-83	66 189	148-04	118	14 180	119-87
Kangaroo Island	9	75.26	1 584	175.40	135	18 577	137-59
Mount Lofty Ranges	90	80.66	16 843	187-58	240	39 691	165-31
Murray	438	87.62	64 618	147-62	188	26 422	140-48
South East	69	77:03	12 079	176.02	1 110	178 726	160-96
Eyre	700	88-80	104 261	149-01	247	32 175	130-33
Northern	197	88.94	23 491	119-14	81	9 826	121.71
Far North	25	83-32	3 082	121.09	2	269	132-71
Total	1 986	87-99	299 438	150.78	2 138	322 754	151-00

The next table gives the area of crops and pastures treated in the State for the years 1965 to 1974.

Use of Artificial Fertilisers, So	outh Australia
-----------------------------------	----------------

	Crops					Pastures						
	Ye	ar				Area Fertilised	Proportion of Total Area Cropped	Fertiliser Used	Fertiliser Used per Hectare	Area Fertilised	Fertiliser Used	Fertiliser Used per Hectare
						'000 ha	Per cent	Tonnes	kg	'000 ha	Tonnes	kg
1965						1 970	91.99	269 387	137	2 061	301 594	146
1966						2 073	89.30	291 501	141	2 119	316 123	149
1967						2 037	89.73	297 093	146	2 076	312 412	150
1968						2 431	87-37	340 037	140	1 728	250 041	145
1969						2 138	88.84	312 313	146	2 008	287 427	143
1970						1 883	87.96	270 908	144	1 938	276 249	143
971						2 113	(a) 85·30	284 448	135	1 822	254 403	140
972						1 864	89.44	258 209	139	2 033	296 192	146
973						2 146	87-53	310 010	144	2 425	382 845	158
974						1 986	87.99	299 438	151	2 138	322 754	151

(a) Not comparable with previous years.

## WHEAT

Wheat has always been a crop of major importance to the economy of this State. South Australia as a wheat producing State ranks fourth in order of importance, and for the ten harvests ending 1973-74 averaged 14 per cent of Australian wheat production.

In the past twenty years a feature of the industry has been that average yields have fluctuated about a higher level of average yield mainly because of improved farming practices, including the adoption of nitrogen-building clovers in the rotation. The average yield per hectare for the ten seasons ended 1974-75 was 1·14 tonnes, a record of 1·58 tonnes being attained in 1960-61. The record wheat crop was 2 263 000 tonnes in 1968-69. Production in 1974-75 was 1 486 000 tonnes.

#### Varieties of Wheat

In each of the Australian States a committee has been set up to examine and recommend the wheat varieties which should be grown by farmers for marketing through the Australian Wheat Board. In South Australia the Advisory Committee on Wheat Quality was established in 1962 to consider advice from the South Australian Department of Agriculture, which carries out tests of wheat varieties being developed and recommends which wheat varieties should be sown by farmers in the various districts. The Department of Agriculture and Fisheries and the Australian Wheat Board require the growers to produce wheat with uniform characteristics in both the Hard class and ASW class and this can be done more successfully if only a few of the best varieties are grown by the farmers.

The Advisory Committee has divided the State into seven wheat growing zones and recommends to farmers only those wheat varieties which are likely to give the best results as far as the protein content of the wheat is concerned, while maintaining a high rate of yield, at the same time. Halberd is the main variety recommended for fair average quality standard wheat and at present Gabo is the most widely grown of the recommended hard wheats with higher protein contents.

The leading varieties of wheat sown for all purposes for the years 1972-73 to 1974-75 are shown in the following table.

Principal Varieties of Wheat Sown, South Australia

Mowieter		Area		Proportion of Total Area		
Variety -	1972-73	1973-74	1974-75	1972-73	1973-74	1974-75
	'(	000 hectare	s		Per cent	
Dirk	40	42	36	3.9	2.9	2.9
Gabo	85	125	67	8.5	8.6	5.4
Gamenya	30	29	29	3.0	2.0	2.4
Halberd	455	821	763	45.2	56.7	62.0
Heron	152	119	59	15.1	8.2	4.8
Insignia	65	66	30	6.5	4.5	2.4
Raven	42	47	46	4.1	3.2	3.7
Sabre	19	28	32	1.9	2.0	2.6
Other	120	173	170	11.9	11.9	13.8
Total area	1 007	1 449	1 231	100-0	100.0	100.0

# Wheatgrowing Districts

Wheatgrowing in South Australia is virtually restricted to the belt between the 200 millimetre and 450 millimetre rainfall isohyets for the period April-November inclusive. The principal wheat producing districts are in the Eyre, Central, Murray and Northern Divisions. These districts accounted for over 90 per cent of the area sown in 1974-75.

Wheat Sown for Grain: Area and Production, Statistical Divisions
South Australia

Ctatistical Division	Are	a	Production		
Statistical Division —	1973-74	1974-75	1973-74	1974-75	
	'000 hec	ctares	Ton	nes	
Adelaide	2	1	1 902	1 405	
Central	244	213	332 676	318 360	
Kangaroo Island	1	(a)	370	305	
Mount Lofty Ranges	45	38	48 299	46 150	
Murray	307	254	316 817	309 332	
South East	29	21	20 944	21 160	
Eyre	603	526	819 198	580 167	
Northern	177	147	225 180	193 294	
Far North	24	20	29 606	15 454	
Total	1 432	1 220	1 794 992	1 485 627	

<sup>(</sup>a) Less than 500 hectares.

### Research

Under the Wheat Tax Act 1957-1973 a tax, not exceeding fifteen cents a tonne, may be levied on all wheat delivered to the Australian Wheat Board and credited to the Wheat Research Trust Account for use by the respective State Wheat Industry Research Committees. Each committee allocates the amounts available for research and reports the expenditure approved to the Wheat Industry Research Council. The Australian Government also makes contributions for wheat research, the amount being equal to the wheat tax levied from the growers. The Wheat Industry Research Council recommends the avenues of research on which this Government grant should be spent.

The wheat research funds are made available to organisations, such as the Commonwealth Scientific and Industrial Research Organisation and the Department of Agriculture and Fisheries, which conduct research on wheat diseases and varieties and on soil structure.

## Marketing

Australian Wheat Board

The Board consists of fourteen members; four appointed by the Australian Minister for Primary Industry and ten representing wheatgrowers (two from each mainland State). The Board has legislative powers over the receival and disposal of all wheat and wheat products and issues licences to bulk handling authorities in each State to act as receivers, which gives them the responsibility for the storage, care and protection of the Board's wheat and its movement from country silos to buyers in Australia and to terminal silos for export. Under the stabilisation plan the Board is the sole authority for marketing wheat in Australia and for marketing wheat and flour for export.

In its first full season, 1939-40, the Wheat Board received 5·3 million tonnes. A record delivery of 14 million tonnes of wheat was made during 1968-69. Deliveries to the Board in 1974-75 totalled 10·7 million tonnes.

## Deliveries to the Australian Wheat Board(a)

Season	South Australia	Australia	Season	South Australia	Australia
	'000 t	onnes		'000 t	onnes
1965-66	984 1 361 601 2 162 1 517	6 379 11 954 6 732 14 033 9 755	1970-71 1971-72 1972-73 1973-74 1974-75	681 1 306 711 1 672 1 377	6 936 7 665 5 438 11 199 10 704

<sup>(</sup>a) Mostly in bulk, but includes weight of bags where used.

During the year ended 30 November 1975 total exports of wheat (including wheat equivalent of flour and wheat products) were 8.6 million tonnes. The

value of the Wheat Board's sales on both the local and export market is shown in the following table.

Australian	Wheat	Roard	Sales	οf	Wheat	and	Wheat	Flour
Australian	wneat	воши	321162	UL	WHEAL	аши	YY HEAL	LIUUI

	Sa	les	Value		
Crop Year	Local	Export	Local	Export	
	'000	tonnes	\$	'000	
1965-66	1 820	4 755	101 480	240 654	
1966-67	1 666	8 526	94 424	545 928	
1967-68	1 906	5 642	114 671	290 101	
1968-69	1 524	6 585	95 171	331 530	
1969-70	1 602	8 185	91 624	371 720	
1970-71	1 703	9 050	97 138	444 674	
1971-72	1 857	7 760	108 255	366 273	
1972-73	2 242	4 137	134 369	214 961	
1973-74	2 319	7 418	163 499	881 427	
1974-75	2 394	8 560	198 002	1 078 889	

# Wheat Delivery Quotas Plan

In March 1969 the Australian Wheatgrowers Federation put forward proposals to the Australian Agricultural Council for the allotment of quotas on deliveries of wheat to the Australian Wheat Board. The Federation's proposals were mainly designed to bring marketable supplies of wheat more into line with available outlets, following the record 1968-69 harvest. The proposals were approved by the Council and later by the Australian Government and became effective for the 1969-70 harvest with total Australian quotas of 9.7 million tonnes and the retention of \$40.42 as the rate per tonne for first payment. State Governments, in 1969 (except Queensland where the legislation was introduced in 1970), enacted the necessary legislation to implement the system of wheat delivery quotas within the States. The quota plan operated for each season from 1969-70 to 1974-75.

The Australian Wheatgrowers Federation successfully recommended in February 1971 that the total wheat quotas for Australia in the 1971-72 season should be 9·2 million tonnes. The 1972-73 quotas were approved at 11·1 million tonnes and the 1973-74 quotas 14 million tonnes. The 1973-74 quotas included allowances for short-falls in production in 1972-73 attributable to poor seasonal conditions. The quotas for South Australia were 2 million tonnes in both the 1973-74 and 1974-75 seasons.

The States were responsible for determining the method of allocation of individual quotas within their respective boundaries. In South Australia the Wheat Delivery Quotas Act, 1969 instituted a Wheat Delivery Quota Advisory Committee consisting of eight members representing wheatgrowers, and one representative each from the Wheat Board, the South Australian Co-operative Bulk Handling Limited and the South Australian Department of Agriculture and Fisheries. A Review Committee of three members was also provided to deal with the appeals by growers against the quota quantities allotted to them.

The basis on which quotas were allocated in South Australia for the 1969-70 season was the average quantity of wheat obtained after listing deliveries from the various farm properties to the Australian Wheat Board during the five-year period from 1964-65 season to 1968-69 season, less 10 per cent.

The Act permitted the Quota Advisory Committee, in certain hardship and other cases, to make special allowances when determining nominal quotas and provides for quotas to be allotted only to growers who are owners of the wheat-farming properties and to lessees, but not to people who are simply share-farmers.

At the instigation of the Australian Wheatgrowers Federation, the Australian and State Governments agreed to the suspension of wheat delivery quotas for an indefinite period from the 1975-76 season. The action of the Federation was motivated by a barely adequate world supply and a serious depletion of carry-over stocks of wheat in recent years, the need to establish carry-over stock reserves within Australia, and because the establishment of the Wool Reserve Price Scheme has made it unlikely that woolgrowers will have to change over to wheat as a major alternative source of income.

# Bulk Handling

The South Australian Co-operative Bulk Handling Ltd, which was incorporated on 7 December 1954, is the sole bulk grain handling authority in this State, and is owned, financed and controlled by the growers. At 31 December 1975 the Co-operative had a total storage capacity, including current contracts let, of 3·4 million tonnes (3·1 million tonnes permanent storage and 0·3 million tonnes temporary storage).

The bulk handling operations of the State have been divided into seven divisions—Ardrossan, Port Giles, Wallaroo, Thevenard, Port Lincoln, Port Pirie and Port Adelaide—each of which provides a terminal port as a shipping outlet for the country silos within the division. The bulk capacity of the respective divisions for each of the three major cereals is shown in the following table.

Bulk Handling Capacity, South Australia 31 December 1975(a)

District	Wi	neat	Bar	ley	O	Oats	
Division	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	
		·	'000 t	onnes		<del></del>	
Ardrossan	148-3		102-1				
Port Giles	24.5		111.8				
Port Adelaide	. 638.8	51.7	221.3	1.0	9.0	2.1	
Port Pirie	313.5	76∙0	62.0		-	*******	
Port Lincoln	. 619.6	95.4	155.2		1.8	-	
Thevenard	. 252-1	64∙0	60.0	_	1.8	7.4	
Wallaroo	345.5	_	76.5		_	<del></del>	
Total	2 342-3	287-1	788-9	1.0	12.6	9.5	

<sup>(</sup>a) Includes current contracts let.

The system by which payments are made to growers changed for the 1975-76 and future seasons. In the past growers forwarded claim forms through the bulk handling authority, after the delivery of wheat. Now a claim form containing the pre-harvest information required by the Board is forwarded by each grower. The form enables the prompt payment of the first advance, on a fortnightly basis after 1 December throughout the harvest period, by directly crediting the net payments to growers' individual bank accounts.

Under the system of pooling wheat, the cost of handling wheat by the Co-operative is reimbursed by the Wheat Board.

## Grading of Wheat and Determination of Standards

To aid the Wheat Board in the marketing of wheat each season, a separate standard sample is determined for the various classes of exportable wheat produced in each State. Samples of the various classes of wheat are then packed in sealed bags and forwarded by the Wheat Board to the potential purchasers of Australian wheat.

In each of the five mainland States, the function of establishing wheat standards each season is performed by the respective Wheat Standards Committees, which have been appointed for this purpose. The Committees comprise representatives of the Wheat Board, the bulk handling authorities, State Departments of Agriculture, the wheatgrowers and the flour millers.

Each standard is determined by collecting a proportionate amount of wheat, for the class concerned, from every delivery point in the State from which the wheat is to be exported. These wheat quantities are then blended to form a State composite sample for that class. After the various bulk wheat samples have been thoroughly mixed, the test weight of each is ascertained in kilograms per hectolitre. The relevant particulars of season, test weight, class of wheat and State concerned are designated on the bags into which the official sample wheat is packed. The bags are then sealed for dispatch to buyers.

In South Australia, the classes of wheat for which official standards are declared each season are South Australian Hard and Australian Standard White (SA). An official standard sample will also be determined for the class known as General Purpose in seasons when sufficient is available for export.

The segregation of South Australian wheat into two classes was first introduced in the 1957-58 season when wheat was separated into a Semi-hard wheat class (after 1966 called Hard wheat) and into what, up to that time, was the long established FAQ (Fair Average Quality) class. This was done in each season since 1957-58 (except 1960-61 and 1966-67 when three classes of wheat were segregated).

From the 1974-75 season, the name of FAQ wheat was changed to the ASW (Australian Standard White) class. In addition, in that season State standard samples were determined for the three main classes of wheat delivered to the Board and the test weights of the respective samples were declared as follows:

Class of Wheat		løgrams Hectolitre
ASW	٠.	 77
Hard		 78
General Purpose		 71

#### Wheat Stabilisation Plan

Wheat grown in Australia is marketed under a stabilisation scheme approved by the Australian and State Governments which provides for:

- (i) the fixing of a home consumption price for each season which may be varied annually by changes in the cost of production;
- (ii) the pooling of the proceeds from local (Australian) and overseas sales of wheat;
- (iii) the operation of a stabilisation fund into which is paid the proceeds of a tax, which is imposed on wheat exported when the average of the export prices exceeds certain specified amounts;
- (iv) the establishing of a stabilisation price each season which may involve Australian Government financial contributions to the stabilisation fund, when the average export price falls below specific levels.

The first post-war Wheat Stabilisation Plan operated between 1948 and 1953. Subsequent stabilisation plans were introduced in 1954 (for seasons 1953-54 to 1957-58), 1958 (for seasons 1958-59 to 1962-63), 1963 (for seasons 1963-64 to 1967-68) and 1968 (for seasons 1968-69 to 1972-73). The 1968 plan was extended to cover 1973-74. The current stabilisation plan will operate for five years from 1974-75 to the 1978-79 season, and contains provisions in relation to the stabilisation price which are based on different principles to those applying to the guaranteed price in previous stabilisation plans.

Under the Wheat Export Charge Act 1974, wheat exported is subject to a tax which is paid into the Wheat Prices Stabilisation Fund. The balance in the Stabilisation Fund may not exceed \$80 million and any surplus must be returned to the growers.

The Stabilisation Fund is used to make up deficiencies in respect of all wheat exported from each crop where the average export realisation falls below the stabilisation price. In the event of the Fund being unable to meet any deficiency the Australian Government is required to meet its obligations under its guarantee, as provided in the stabilisation legislation.

## International Grains Agreements

The history of these agreements goes back to 1947 when negotiations commenced, between the principal exporters and importers of wheat throughout the world, for an agreement which would stabilise international trading in wheat and influence equitable and stable prices. Eventually, after hard bargaining, the first agreement, which was of four years duration, came into force on 1 August 1949 and brought to fruition earlier efforts extending back over the previous twenty years to stabilise world wheat marketing through international co-operation. Along with thirty-seven importing nations and five exporting nations, Australia, as an exporter, participated in that agreement because it assured the nation's wheatgrowers of overseas markets at payable prices.

The initial International Wheat Agreement of 1949 has been reviewed and extended by subsequent agreements through to 30 June 1975. The last agreement which contained pricing provisions was the International Grains Arrangement 1967 described on page 383 of the South Australian Year Book 1970. The

current agreement is the International Wheat Agreement 1971 which was due to expire on 30 June 1974 but has been extended by member nations by Protocol (a form of diplomatic document) until 30 June 1978. The current 1971 Agreement comprises two separate legal instruments known as the Wheat Trade Convention and the Food Aid Convention which are linked by a common preamble. An explanation of the terms of the current 1971 Agreement was included on page 421 of the South Australian Year Book 1974.

The Protocol for the extension of the Food Aid Convention to 30 June 1978 provides for a Food Aid Committee to administer contributions of international food aid of grains, grain products and cash by certain nations who are parties to that Protocol.

#### **Prices**

The table below shows the trend in export and domestic prices of Australian wheat for the years 1965-66 to 1974-75.

Export	bno	Domestic	Prices	οf	Australian	Wheat
LAPULL	anu	Nomeanc	1 11662	UL	Austranan	vv ncat

Ye	ar	Export Price per Tonne (a)	Home Price per Tonne
		\$	\$
1965-66		52.54	56.22
1966-67		56.59	57-69
1967-68		52.54	60-69
1968-69		49-24	62.83
1969-70		48-13	63-57
1970-71		51.44	63.94
1971-72		56.59	65-40
1972-73		97.37	67-63
1973-74		135-18	71.10
1974-75		116.52	83.40

<sup>(</sup>a) Based on the average of each of the twelve monthly prices, year ended November.

The export prices shown in the table are the basic selling prices for FAQ (now known as ASW) bulk wheat f.o.b., terminal ports. The home prices shown for the seasons 1965-66 to 1968-69 inclusive, are those set by the Wheat Board for bulk wheat (free-on-rail, terminal port basis) sold to millers for grinding into flour for consumption in Australia. In those seasons the prices charged by the Board for wheat for stock feed in Australia were the same as those charged for wheat for human consumption. However, from 1 December 1969 the Board introduced concessional prices for wheat used for stock feed and industrial purposes. The result of these altered pricing arrangements was that different prices were established from 1969-70 season onwards for the various categories of local sales and these prices were amended annually. From 1 December 1969 until 30 November 1973 the following f.o.r. terminal ports prices applied for FAQ bulk wheat.

f.o.r. Port Terminal Prices for FAQ Bulk Wheat

Doutinglous	Year ended 30 November			
Particulars	1970	1971	1972	1973
	Pr	ice per to	nne (dolla	ırs)
Basic home consumption price Milling (for home consumption flour) Stockfeed/industrial purposes	63·38 60·44 52·73	63·93 60·99 53·28	65·40 62·46 54·75	67·63 64·65 56·98
Stockfeeders (not acceptors of Wheat Board contract arrangements)	55.12	56.95	58.79	67-63

From 1 December 1973 concessional prices for wheat no longer applied. For the year 1973-74 the price for all purposes was \$71·10 per tonne (f.o.r. terminal ports for FAQ). For the year 1974-75 the price of ASW wheat was \$83·40 per tonne and the price operating from 1 December 1975 was \$98·70 per tonne.

#### BARLEY

#### **Production**

In 1974-75 the area sown to barley for grain in South Australia represented 38 per cent of the Australian total and yielded 45 per cent of the grain produced. Of the area sown for grain in South Australia, 97 per cent was 2-row barley, reflecting the suitability of certain areas of the State for the production of high quality malting barley. For malting purposes a plump mellow grain with fine skin coverings is required, and this can best be obtained when the ripening period is somewhat prolonged by cool conditions, without high temperature or drying winds.

Area and Production of Barley for Grain: Statistical Divisions, South Australia

Statistical Division -	Aı	rea	Production	
Statistical Division -	1973-74	1974-75	1973-74	1974-75
	'000 h	ectares	'000 t	onnes
Adelaide	4	4	6	8
Central	216	242	332	508
Kangaroo Island	2	2	2	1
Mount Lofty Ranges	25	32	34	53
Murray	162	168	148	203
South East	23	25	23	30
Eyre	149	171	187	249
Northern	40	50	53	77
T NT //	7	7	23	11
Far North	,	,	,	3
Total	627	701	793	1 124

Total area sown to barley in 1974-75 was 717 000 hectares, 701 000 hectares being sown for grain. A record production of barley of 1 134 000 tonnes was achieved in 1974-75.

Unlike wheat, barley growing has nearly always been confined to very suitable districts resulting in high and remarkably stable yields, the record yield being 1.62 tonnes per hectare in 1974-75.

Yorke Peninsula is the major barley-producing district in South Australia. In the 1974-75 season this area contributed approximately 26 per cent of the total crop. It has an ideal climate for barley growing as the moisture-laden breezes off the gulfs on either side retard ripening.

#### Varieties

The most widely grown barley variety before 1970-71 was Prior, which for the three seasons ended 1969-70 averaged about 60 per cent of the total area sown. Another variety, known as Noyep, is similar to Prior but is earlier maturing and is suitable to areas where a sudden cut-off in spring rainfall is experienced.

A new malting variety, Clipper, was released in South Australia to replace Prior in 1968. Reported area sown to Clipper in the 1970-71 season was 330 000 hectares, in the 1971-72 season 512 000 hectares and in the 1974-75 season 484 000 hectares. The variety has greater straw strength, much less subject to wind damage, is adapted to conditions of high soil fertility and in tests produced substantially higher yields than Prior. These features together with improved malting quality represent considerable advantages for the grower and the industry as a whole. In 1974-75 Clipper was the most widely grown variety, accounting for 68 per cent of total area sown to barley. The percentage sown to Prior and Noyep dropped to 4 and 5 per cent respectively. Another variety, Ketch, was released in 1970. The proportion sown to Ketch in 1974-75 was approximately 8 per cent.

#### Research

Because of the inherent similarities, the barley industry has in many instances benefited from the technological advances achieved by the wheat industry, namely the use of superphosphate and the inclusion of pastures in rotation, but certain problems peculiar to barley have necessitated the undertaking of extensive research. The barley research program is conducted by the Department of Agriculture and Fisheries and the Waite Agricultural Research Institute for which the Australian Barley Board provides financial support.

### Marketing

The marketing of barley is under the control of the Australian Barley Board which operates in South Australia and Victoria and provides an orderly marketing system for barley grown in these States. In the 1974-75 season the Board received a record total of 1 343 000 tonnes. Since 1966-67 receivals of bulk barley have been greater than receivals of bagged barley.

For marketing purposes all barley is classified on sample before delivery. Classification is firstly by row variety and secondly by quality—Malting (No. 1 and No. 2), Milling (No. 3) and Feed (No. 4 and No. 5) for 2-row and Malting and Feed (No. 4 and No. 5) for 6-row.

Australian Barley Board Receivals, South Australia

	2-Row			6-Row		
Season -	Malting	Milling	Feed	Malting	Feed	Total
			'000	tonnes		
1967-68	3	20	138		1	162
1968-69	126	182	167	1	9	485
1969-70	80	147	312	_	5	544
1970-71	109	150	343		3	605
1971-72	98	287	475		2	862
1972-73	5	29	315		1	350
1973-74	117	209	346		3	676
1974-75	139	435	485		13	1 072

The price of malting barley is determined on the basis of an agreed formula and subsequently the prices of barley for distilling and pearling are calculated—the prices for feed purposes are determined monthly. The home consumption prices determined by the Board for barley for seasons 1971-72 to 1974-75 are shown below.

Price per Tonne of Barley for Home Consumption

Season	Malting No. 1	Distilling and Pearling No. 3 Grade	Feed No. 4 Grade	Feed No. 5 Grade
Bagged Barley		Dol	llars	
1971-72	70.54	67.02	47·18	44.97
3 year Contract	70.25	66.75		
Other	72.50	69.00	58.00	56.00
From 17/1/73	,,,,,,		69.00	67.00
From 21/11/73 1973-74:	•	•••	75.00	73.00
3 year Contract	70.25	66.75	71.25	69:35
Other	76.10	72.60	75.00	73.00
1974-75:	70 10	72.00	75 00	75 00
3 year Contract	70.25	66-75	83.60	81.70
Other	97· <b>0</b> 0	93.50	88.00	86.00
Bulk Barley				
1971-72	65-25	61.73	41.89	39.68
3 year Contract	65.25	61.75		
Other	67.50	64.00	53.00	51.00
From 17/1/73	0, 50	04 00	64.00	62.00
From 21/11/73	• •	••	70.00	68.00
1973-74:	• •	••	70 00	00 00
3 year Contract	65.25	61.75	66:50	64.60
Other	71.10	67.60	70.00	68.00
1974-75:	11 10	0, 00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	00 00
3 year Contract	65.25	61.75	78.85	76-95
Other	92.00	88.50	83.00	81.00

#### OATS

The milling qualities of most oats grown in South Australia do not meet the forage and the production of grain and hay in recent years.

Onte	Conth	Australia
Uais.	SOUTH	Austrana

Seaso	_		Ar	Area Sown for  Total		Tetal	Produ	iction
Seaso	11	•	Grain	Hay	Forage	Area	Grain	Hay
				'00	) hectares		'000	tonnes
1970-71			195	52	88	335	153	180
1971-72	• • • •	• •	169	53	56	278	166 74	204 120
1972-73 1973-74	• • • •	• •	142 152	53	60	254 252	142	192
1973-74		• •	132	56 35	44 45	215	112	117

The milling qualities of most oats grown in South Australia do not meet the requirements of overseas markets and only a small proportion of the harvest is exported; most of the crop is used as animal fodder. As is the case with barley, some of the area sown for grain and hay is grazed until June or July then closed to sheep to allow re-growth to a crop. Part of the area sown for forage is left to stand until it is used as dry grazing in autumn, when other fodder is not plentiful.

In 1974-75, 83 per cent of the total area of oats was sown in four varieties—Swan, 107 000 hectares; Avon, 34 000 hectares; Irwin, 25 000 hectares; and Kherson, 12 000 hectares.

#### RYE

Rye is a minor crop, but it has been used to control sand drift and particularly to stabilise the light soils of the Murray Mallee. Because the sands are deficient in two main nutrients (nitrogen and phosphorus), a mixed superphosphate-ammonia fertiliser is sown with the rye seed early in the season. The rapid early growth of the rye while the ground is still warm and before the strong winds of winter cause sandblast is at present the most effective form of controlling drifting sand. Rye provides early greenfeed and a few bushels of grain per acre is produced on some farms. Although most grain is used for stock feed, varying quantities are exported in different years for milling. Rye hay is of poor nutritional quality and only a few hundred tonnes are produced each year.

In 1974-75, 10 200 hectares of rye for grain yielded 1 733 tonnes. Record production was 12 000 tonnes from 23 000 hectares in 1958-59.

#### HAY

The quantity of hay produced varies considerably from year to year according to seasonal conditions and the need to replace stocks used during the previous

season. The main crops cut for hay in recent years have been oats, lucerne, and clover and grass hay which together account for more than half of all hay produced.

Hay: Area and Production, South Australia

Season	Oaten	Wheaten	Lucerne	Barley and Rye	Clover and Grass	Total
			AREA ('00	00 hectar	es)	
1967-68	64	33	20	17	40	174
1968-69	61	21	<b>32</b>	15	120	249
1969-70	41	22	27	10	55	155
1970-71	52	19	33	14	79	196
1971-72	53	15	37	10	131	245
1972-73	53	20	37	16	84	210
1973-74	56	14	45	10	143	268
1974-75	35	10	28	6	111	190
		Pı	RODUCTION	('000 to	nnes)	
1967-68	116	69	99	30	112	425
1968-69	242	87	155	48	468	1 001
1969-70	156	87	136	31	207	618
1970-71	180	66	163	39	308	755
1971-72	204	61	176	31	509	982
1972-73	120	53	154	30	265	623
1973-74	192	46	167	25	449	879
1974-75	117	34	119	17	375	662

Between 20 000 and 50 000 tonnes of silage are produced in most years and in certain areas this is an important supplementary stock food; in 1974-75 production was 35 000 tonnes.

#### **VEGETABLES**

The market garden industry in South Australia is characterised by a large number of growers, most of whom cultivate only a few hectares. Many of the gardens form part of a larger holding. Much of the production of the industry comes from properties with easy access to the Adelaide market.

Of the total area of approximately 10 000 hectares devoted to market gardens, districts adjacent to Adelaide account for 4 000 hectares producing all types of vegetables, including large quantities of celery and early tomatoes for export. Over 4 500 hectares are cultivated in the South East Division, mainly peas, sweet corn and potatoes. An area of some 400 hectares in Northern Division (mainly on the costal plains near Port Pirie) is used for the production of peas and early tomatoes for Adelaide and for export to the Melbourne market. Nearly 1 350 hectares along the River Murray are devoted to production of peas,

pumpkins and melons for the Adelaide market, tomatoes for local markets and small areas of most other vegetables.

The bulk of the potato production comes from the central and southern Adelaide hills and from the Mount Gambier area. The average yield has risen progressively to a record of 26 tonnes per hectare in 1972-73 and again approached this level in 1974-75. This improvement is largely because of better quality seed, improved fertilisers and advances in pest and disease control.

The South Australia Potato Board is constituted under authority of the Potato Marketing Act, 1948-75 to control the sale and delivery of potatoes by growers. It fixes the maximum and minimum prices and the conditions under which potatoes may be sold. Members of the Board are representatives of retail sellers, merchants and growers of potatoes.

In 1974-75, 3 223 hectares were sown to green peas in the South East Division for factory processing. Production of green peas from this area accounted for about 97 per cent of the total crop. The Port Pirie-Mambray Creek area, the hills to the south of Adelaide and Upper Murray irrigation areas are other important areas for pea production.

The Adelaide plains produce most of the South Australian tomatoes which are grown in glass houses. Significant quantities, mostly for canning and juice production in local factories, are now grown in the Upper Murray irrigation areas. In recent years high yields have resulted from the introduction of new varieties.

The following table shows the area and production of the principal vegetables for human consumption in South Australia in 1973-74 and 1974-75.

Vegetables f	'nr	Human	Consumption.	South	Australia

Vegetable -	Aı	rea	Production		
· ogottolo	1973-74	1974-75	1973-74	1974-75	
	Не	ectares	Tor	nes	
Beans	73	50	310	304	
Cabbages	227	225	9 525	9 460	
Carrots	252	274	6 529	5 840	
Cauliflowers	226	208	9 810	10 540	
Celery	82	95	5 325	5 427	
Lettuce	204	194	3 121	3 409	
Melons	99	93	1 276	1 256	
Onions	831	778	21 497	19 240	
Peas	3 387	3 492	17 826	24 606	
D. 4. 4	2 477	2 747	60 491	70 849	
D1.!	372	538	4 943	6 621	
	509	551	19 299	19 537	
Tomatoes			939	1 143	
Turnips	73	106	939	1 14.	
Other	578	826	• •	• •	
Total	9 390	10 177		••	

#### **GRAPES**

Approximately 43 per cent of Australia's vineyard area is located in South Australia where the bulk of the grapes grown are used for winemaking. In 1973-74 South Australia produced 164 million litres of wine and 3 196 tonnes of dried vine fruit representing 57 per cent and 7 per cent respectively of total Australian production. The following table shows the area of vineyards in South Australia for the seasons 1970-71 to 1974-75.

# Area of Vineyards, South Australia

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
Vines:		Hectai	es		
Bearing age Not yet bearing	22 396 5 263	23 924 4 845	25 200 4 328	26 178 3 424	26 833 3 <b>5</b> 33

The area planted to vines at 31 March 1975 was a record 30 366 hectares exceeding the previous record at March 1974 by 764 hectares. Total production in 1974-75 was a record 290 561 tonnes exceeding the previous record harvest in 1969-70 by 18 239 tonnes and last year's harvest by 71 409 tonnes.

# Production of Grapes, South Australia (a)

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
Grapes:		7	Tonnes	•	
For wine	208 523 1 058 15 038	224 718 1 849 44 517	220 576 1 213 22 106	206 022 900 12 230	272 007 1 388 17 166

<sup>(</sup>a) Classified according to purpose for which grapes are used.

About one-third of the State's wine-grape crop is received by the co-operative wineries. Nearly all of this is grown by members who receive a down payment on each tonne, followed by further payments over a period of up to five years according to realisation made on the product. The balance of the crop is processed by proprietary wineries which purchase grapes from the growers. Minimum prices, according to variety, are determined by the South Australian Commissioner for Prices and Consumer Affairs. The proprietary wineries also purchase a large proportion of the wine, brandy and spirits made by co-operatives.

The following table shows the area, production and utilisation of grapes for the seasons 1965-66 to 1974-75.

# Area, Production and Utilisation of Grapes, South Australia

Area of Season Vines		Total Grape Wine Production Production (Fresh) (a) -		Dried Fruit Production			
Scason	Villes	(Fiesh)	<i>(a)</i>	Currants	Sultanas	Raisins	
	Hectares	Tonnes	'000 litres		Tonnes		
1965-66	23 767	186 752	108 579	3 204	9 845	2 261	
1966-67	23 099	229 034	133 310	3 833	12 614	1 148	
1967-68	23 524	204 458	136 633	3 162	4 671	612	
1968-69	24 513	221 027	164 505	2 298	1 603	167	
1969-70	26 239	272 321	196 850	3 378	2 981	239	
1970-71	27 659	224 618	169 265	3 201	1 132	202	
1971-72	28 769	271 084	181 907	3 098	7 979	633	
1972-73	29 528	243 895	180 191	2 026	3 244	468	
1973-74	29 602	219 152	164 328	1 053	1 819	324	
1974-75	30 366	290 561	214 349	2 370	2 087	327	

<sup>(</sup>a) Excludes grape spirit added.

Grapes are grown commercially in South Australia in non-irrigated areas of 480 to 660 millimetres rainfall, and in much drier areas (frequently with less than a 250 millimetre rainfall) where irrigation is available (e.g. Upper Murray irrigation areas). The following table gives particulars of area of vines and production of grapes in the main statistical divisions in 1974-75.

Area and Production of Vines: Statistical Divisions, South Australia 1974-75

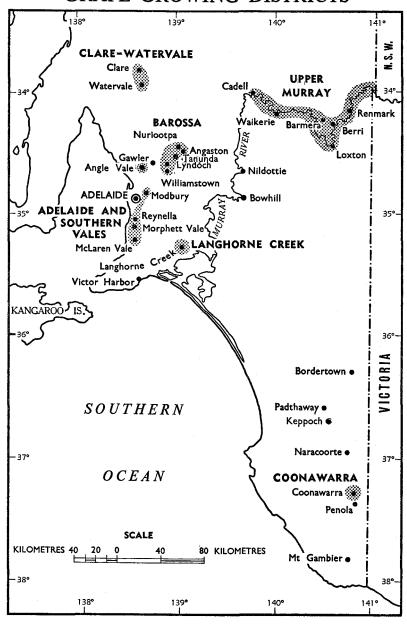
	Are	a	Pr	oduction of	Fresh Gra	pes
Statistical Division	Bearing	Not bearing	Wine	Table	Drying	Total
	Hec	tares		To	nnes	
Adelaide	3 951	639	28 195	8	274	28 477
Mount Lofty Ranges	9 561	1 378	55 467	2	296	55 765
Murray	11 745	1 077	173 141	1 377	16 576	191 094
South East	1 472	407	14 449		-	14 449
Total (a)	26 833	3 533	272 007	1 388	17 166	290 561

<sup>(</sup>a) Includes remainder of divisions.

# **Grape Growing Districts**

The grape growing districts of South Australia are subject to substantial variety in geographical location, climatic variations and soil conditions and can be divided into six easily recognisable regions (see map on page 438) ranging from the Clare-Watervale district in the north to the southern limit of the grape growing area at Coonawarra in the south-east of the State and bounded by the warm irrigated areas of the Murray to the east.

# PORTION OF SOUTH AUSTRALIA GRAPE GROWING DISTRICTS



Supplementary irrigation is carried out in some grape growing districts which have not been officially designated as irrigation areas, especially Langhorne Creek and Coonawarra where approximately 50 to 60 per cent of all grapes are under irrigation. The other areas are mainly dependent on winter rainfall stored in the sub-soil by careful dry-farming methods to be used during the summer growing season of the vine—the yields in the non-irrigated districts are more variable than the Upper Murray irrigation areas.

District average yields in the irrigated areas are 18 to 20 tonnes per hectare although individual vineyard yields of 38, and even 50 tonnes per hectare are not uncommon. In the non-irrigated districts the average is 4 to 8 tonnes per hectare with individual vineyards producing 20 to 25 tonnes per hectare in favourable years.

# Grape Varieties

The following table shows the area planted to the principal grape varieties in South Australia. The most common varieties include sultana and currant which can be used for dried fruit as well as wine or spirit production. The grape variety names used are those recommended for publication throughout Australia by the Grape Industry Advisory Committee.

Principal Varieties of Vines, South Australia

Variety	March 1972	March 1973	March 1974	March 1975
		Hec	tares	.,,,
Sultana	3 252	3 084	2 871	2 815
Muscat Gordo Blanco	2 094	2 036	1 903	1 900
Currants	1 216	1 157	1 028	943
Grenache (a)	5 273	5 366	5 321	5 364
Shiraz	4 422	4 772	4 937	5 297
Doradillo	1 904	1 882	1 822	1 787
Palomino (Paulo, Listan)				
Common Palomino (b)	2 671	2 646	2 525	2 514
Pedro Ximinez J				
Semillon $(c) \ldots \ldots $				
Rhine Riesling }	2 858	3 101	3 298	3 511
Clare Riesling J				
Mataro	1 505	1 575	1 571	1 628
Cabernet Sauvignon	1 438	1 684	1 908	2 153
Other	2 133	2 225	2 418	2 454
Total	28 769	29 528	29 602	30 366

<sup>(</sup>a) Includes White Grenache. (b) Includes False Pedro. (c) Includes Madeira.

A special article on the wine industry in South Australia was included on pages 375-96 of the South Australian Year Book 1968.

## ORCHARD FRUIT

A large variety of fruit crops is grown in South Australia. The main types are oranges, peaches and apricots (predominantly grown in the irrigation

settlements of the Upper Murray) and apples (nearly all grown in the Adelaide Hills). The following table relating to 1974-75 production shows the concentration of fruitgrowing in the Adelaide, Mount Lofty Ranges and Murray Divisions.

Production of Principal Fruit Crops: Statistical Divisions, South Australia 1974-75

	Statistical Division							
Fruit	Adelaide	Iount Lofty Ranges	Murray	Other	Total			
Citrus fruit:			Tonnes	-				
Oranges; Navel Other	34 39 262	22 70 13	49 884 75 445 15 982	367 592 166	50 307 76 146 16 423			
Non-citrus fruit: Apples	7 755 103 85 1 627 477	14 775 553 198 2 451 406	614 11 819 22 307 7 282 491	37 60 81 20 18	23 181 12 535 22 671 11 380 1 392			

The following table of citrus trees of bearing age and production during the past five seasons shows the predominance of navel and valencia oranges. Other types of oranges, lemons and limes, mandarins, grapefruit, etc., together represent only 12 per cent of total citrus production.

Citrus Fruit: Trees and Production, South Australia

				Lemons	3		
Season		Oranges		and		Grape-	Total
	Navel	Valencia	Other	Limes	Mandarins	fruit	Citrus
		Tr	EES OF B	EARING .	Age ('000)		
1970-71	544	750	6	50	59	41	1 450
1971-72	546	783	9	59	67	44	1 507
1972-73	544	797	7	70	67	43	1 52
1973-74	540	802	8	72	66	45	1 53
1974-75	530	795	11	78	67	48	1 52
			Produc	TION (T	onnes)		
1970-71	45 429	71 147	493	3 181	2 748	4 447	127 44
1971 <b>-72</b>	44 784	56 281	856	3 570	3 055	5 699	114 24:
1972-73	47 396	<b>7</b> 7 717	591	4 603	2 755	5 657	138 719
1973-74	45 750	66 985	631	6 108	3 847	6 017	129 33
1974-75	50 307	75 325	821	7 360	3 371	5 692	142 87

Citrus growing is concentrated in the irrigation settlements of the Upper Murray where approximately 95 per cent of the total crop is produced. The industry has shown great expansion in the last decade; in 1974-75 a record production of 142 876 tonnes was achieved.

Apple growing is the principal non-citrus fruit industry and is concentrated in the Adelaide Hills. The yield per bearing hectare which averaged 9 tonnes for the ten seasons ended 1961-62, rose to a record 16 tonnes per bearing hectare in 1968-69. A record production of 33 000 tonnes was achieved in 1940-41, while production in 1974-75 was 23 181 tonnes.

Pears are grown in the Adelaide Hills, in the Barossa Valley and on the Murray irrigation settlements. The yield from the 1970-71 harvest was a record 13 000 tonnes from 636 hectares. Production in 1974-75 was 11 380 tonnes.

The stone fruits industry became important following development of the irrigation schemes. Production of peaches has shown the greatest increase: the 1951-52 yield of 3 000 tonnes from 835 hectares was typical for the crop until that time, but by 1966-67 the yield was a record 29 000 tonnes from 1924 hectares. In the same period production of apricots rose from 11 000 to 28 000 tonnes. South Australia is the major apricot-producing State, with the greater part of the crop being dried and much of the remainder being canned.

Cherries, plums and prunes, and almonds are the most important of the remaining crops.

Non-citrus Orchard Fruit: Trees and Production, South Australia

Season	Apples	Apricots	Cherries	Peaches	Pears	Plums and Prunes
	-	Trees	OF BEAR	ING AGE	(000°)	
1970-71	538	361	47	384	166	66
1971-72	538	371	49	379	170	65
1972-73	523	376	45	359	163	62
1973-74	509	369	45	334	157	57
1974-75	485	346	45	317	150	60
		Produ	стіон (Т	onnes)		
1970-71	30 262	27 736	1 097	26 194	13 246	2 240
1971-72		23 805	881	26 075	11 790	1 950
1972-73		22 928	1 059	25 457	13 076	2 057
1973-74		21 046	814	19 442	10 091	1 678
1974-75		12 535	779	22 671	11 380	1 392

The Upper Murray irrigation areas and the Barossa Valley of South Australia account for almost the entire Australian production of dried apricots, peaches, pears and nectarines. A small proportion of the Australian production of dried prunes is produced in the Barossa Valley and in the Noarlunga district.

Production of dried fruit in 1974-75 included 1 138 tonnes of dried apricots 234 tonnes of dried peaches, 173 tonnes of plums and prunes and 335 tonnes of dried pears.

The Dried Fruits Board, constituted under the Dried Fruits Act, 1934-1972, regulates marketing in South Australia by determining a quota for home sale of dried fruits in each year and encourages the consumption of dried fruits by advertising.

#### OTHER CROPS

Other crops cultivated in South Australia include field peas, nursery products, cut flowers, pasture seeds, vegetable seeds, chicory and linseed.

In 1974-75, 11 593 hectares of field peas were grown for grain yielding 13 364 tonnes; virtually all of this area is located in the cereal growing districts north of Adelaide. Field peas are grown mainly as a livestock fodder, or for processing into split peas.

Most of the lucerne and other pasture seeds are grown in the cooler, moist regions, particularly in the south-east of the State. During the 1974-75 season approximately 44 per cent of the 1824052 kg of lucerne seed produced in the State was grown in the South East Division.

A considerable portion of the area devoted to nurseries is found in the vicinity of Adelaide. In addition there are several fruit tree nurseries in the horticultural districts of the River Murray.

# PLANTING AND HARVESTING OF CROPS

The main crops of South Australia are normally planted and harvested during the periods listed below.

#### Usual Months of Planting and Harvesting, South Australia

Crop	Planting	Harvesting
Cereals:	_	
Wheat	April-June	November-January
Barley	May-July	November-January
Oats	April-June	November-January
Fruit:		
Grapes	• •	February-May
Citrus	• •	May-February
Apples	• •	January-April
Apricots	• •	December-January
Peaches	• •	December-March
Pears	• •	January-April
Vegetables:		
Potatoes	July-January	November-June
Tomatoes:		
Field	September-February	January-June
Glasshouse	March-June	July-January

#### VALUE AND PRICES OF CROPS

The gross value of crops (including pastures) for South Australia in the 1974-75 season was \$428 253 000. Gross value is defined as the value placed on recorded production at wholesale prices realised in principal markets. Where products are absorbed at a local point or become raw material for a secondary industry the value in each case is presumed to be the value at the principal market.

In the following table gross values of principal crops for the seasons 1970-71 to 1974-75 are shown.

# Gross Value of Principal Crops, South Australia

Commodity	1970-71	1971-72	1972-73	1973-74	1974-75p
Cereals:			\$,000		
Wheat. Barley Oats Rye Canary seed Crops for hay Crops for greenfeed or silage	40 562 34 902 5 053 357 16 4 558 1 427 829	76 381 40 295 5 496 306 20 4 752 907 1 159	44 588 27 506 3 974 240 13 6 709 1 221 705	189 202 68 276 8 184 131 11 9 276 1 351 1 602	160 660 119 525 6 318 120 39 5 944 n.a. 1 612
Orchard and berry fruit:					
Citrus Apples Apricots Peaches Other	12 635 4 343 5 370 2 918 4 665	12 885 4 007 4 300 2 999 4 571	12 995 5 003 5 263 4 385 5 720	12 400 4 434 5 226 3 312 5 419	14 865 7 975 4 016 6 635 6 875
Vine fruit:  Wine grapes  Table grapes  Dried currants, raisins, etc		15 988 506 4 496	18 167 384 2 498	19 119 340 2 097	25 242 654 3 046
Vegetables: Potatoes	15 438	4 393 1 658 16 963 2 994 205 077	5 796 1 643 17 903 2 911 167 623	11 172 1 698 23 479 3 414 370 143	15 776 2 513 24 779 7 203 413 796
Pastures:					
Pasture seed	4 055	2 232 5 897	3 023 7 122	4 929 11 242	5 443 9 014
or silage	58	<i>n.a.</i> 8 129	n.a. 10 145	63 16 234	n.a. 14 457
Gross value of Crops	164 895	213 206	177 768	386 377	428 253

Market prices of principal crops grown in South Australia for the years 1970-71 to 1974-75 are set out in the following table. The average price of wheat in the 1974-75 season was a record high \$108.82 per tonne. The price of wheat rose from \$56.09 per tonne in 1972-73 to \$106.00 per tonne in 1973-74. The highest price previously recorded was \$61.77 per tonne in 1952-53. The lowest average price recorded in the past 25 years was \$49.05 per tonne in 1954-55.

A new record high price of \$106.37 per tonne for barley was set in the 1974-75 season. The lowest average price recorded in the past 25 years was \$36.82 per tonne in 1969-70.

The average price of oats in the 1974-75 season was \$63.00 per tonne. In the past 25 years oats prices have been as low as \$29.10 per tonne and as high as \$64.30 per tonne.

Prices of Principal Crops, South Australia

Commodity	1970-71	1971-72	1972-73	1973-74	1974-75p
Cereals:	Dollars per tonne				
Wheat (a)	52·98 49·21 38·08 59·12	55·26 40·96 37·20 41·98	56·09 59·30 62·70 94·35	106·00 88·29 63·49 61·92	108·82 106·37 63·00 73·00
Fruit:     Apples	180·04 306·82 373·31 194·98 97·37 94·16	205·76 316·92 385·56 209·68 101·05 116·66	246·18 331·71 393·10 232·31 78·08 92·32 311·89	256·29 271·45 438·00 243·11 78·08 92·31	386·00 541·00 672·00 320·00 96·91 105·14 471·00
Wine (b)  Vegetables: Potatoes (a) Onions Tomatoes; Glasshouse Other	83·80 87·77 320·60 306·82	71·15 60·55 122·99 346·32 227·82	85·05 105·21 296·66 335·57	92·80 185·10 265·00 435·00 352·00	92·80 223·05 201·00 563·00 289·00

<sup>(</sup>a) Average price realised.

#### PASTORAL AND DAIRYING

Pastoral activities, with sheep grazing predominant, are widespread in South Australia under widely varying climatic conditions from the arid saltbush plains in the Far North through to the lush, well-watered pastures of the South East.

<sup>(</sup>b) Weighted average price at winery.

Livestock numbers have increased markedly since 1960 (although sheep numbers fell in 1967-68, in 1971-72, and quite markedly in 1972-73). The bulk of the expansion of the industry has been confined to the heavier rainfall districts.

## The Dog Fence

This fence is an unbroken barrier of wire netting about 2 metres high extending for more than 8 000 kilometres through South Australia, along the South Australia-New South Wales and the New South Wales-Queensland borders and through part of Queensland. It has been erected to protect the sheep lands of these States from the ravages of dingoes (native dogs). The part of the fence within South Australia extends in a tortuous line from the head of the Great Australian Bight to the New South Wales border for a distance of nearly 2 400 kilometres. The whole of the sheep population of South Australia is now confined within the area enclosed by the dog fence which effectively excludes the dingoes.

#### **PASTURES**

There has been a significant increase in the area of sown pastures over the past twenty years. Area under pasture for the years 1970-71 to 1974-75 is shown for statistical divisions in the following table.

Area 1	Under	Pasture:	Statistical	Divisions.	South	Australia (a)

Statistical Division	1970-71	1971-72	1972-73	1973-74	1974-75		
	'000 hectares						
Adelaide	24	23	26	26	24		
Central	190	168	165	196	191		
Kangaroo Island	141	149	155	166	162		
Mount Lofty Ranges		244	285	302	293		
Murray		470	500	544	617		
South East	1 267	1 342	1 461	1 502	1 526		
Eyre	466	482	506	616	657		
Northern	110	106	119	131	152		
Far North	13	10	12	17	19		
Total	2910	2 994	3 230	3 500	3 641		

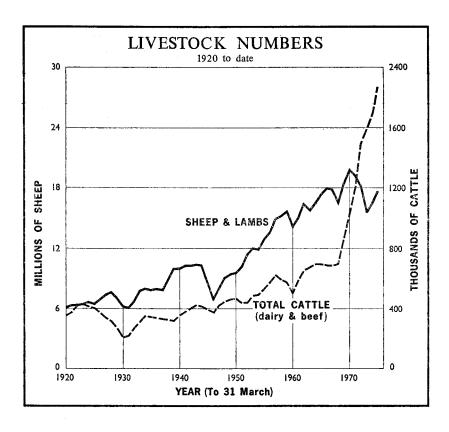
<sup>(</sup>a) Lucerne, clovers (all kinds), rye grasses (all kinds), cocksfoot, paspalum, phalaris, primrose, sudan and veldt.

The Murray Mallee and Eyre Peninsula have been transformed from unstable farming districts to highly productive areas through the sowing of more and improved pastures. In earlier years most pasture plants available flourished only in the higher rainfall zones of the State. At that time Mount Barker subterranean clover was the predominant pasture. New varieties have been

introduced, including Clare, Geraldton, Dwalganup and Yarloop subterranean clovers. These are suited to the hard setting soils of the important wheatgrowing area extending northward from Adelaide to Jamestown.

Another type of legume, known as medics, has been found to be suitable for the drier cereal country, especially the mallee soils. Five medics are grown: Hannaford, Jemalong Barrel, Harbinger Strand, Gama Paragosa and Snail. Lucerne is also extensively grown; it thrives under irrigation yet still grows in areas with as little as 250 millimetres of rainfall a year. It is both salt-resistant and drought-resistant and is grown in most areas of the State. Strawberry clover is the important legume on the black soils of the South East.

The most important perennial grasses in the better rainfall areas are phalaris tuberosa, perennial rye grass and cocksfoot while the annual, wimmera rye grass is most widely used in the medium to low rainfall areas. The naturalised annual grasses which occur over the whole of the State contribute substantially to total pasture production.



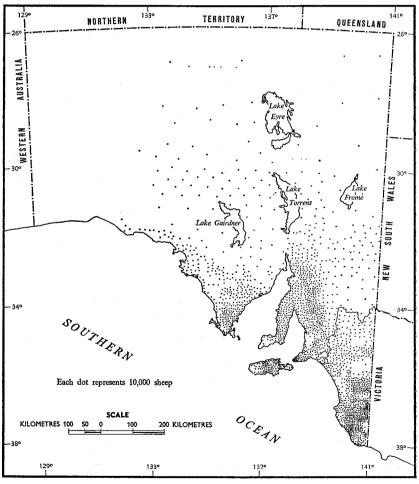
## SHEEP

# Numbers and Distribution

At 31 March 1970 a record number of 19747 000 sheep were being maintained in South Australia but drought conditions had reduced the number to 15651 000 at 31 March 1973. The number of sheep at 31 March 1975 was 17621 000.

# SOUTH AUSTRALIA SHEEP DISTRIBUTION

At 31 March 1970.



By far the greatest concentration of sheep is in the South East Division which carried 4.7 million sheep at 31 March 1975. In the Upper South East Subdivision, the carrying capacity has been doubled in recent years by large scale land development schemes involving the application of fertilisers containing trace elements. The next largest concentration of sheep at 31 March 1975 was in the Eyre Division (2 549 000) and sheep numbers of over 2.1 million were reported both in Murray and Northern Divisions.

# Sheep Numbers: Statistical Divisions, South Australia At 31 March

Statistical Division	1971	1972	1973	1974	1975
			'000		-
Adelaide	164	133	103	112	96
Central	1 916	1 816	1 503	1 654	1 768
Kangaroo Island	896	814	700	705	768
Mount Lofty Ranges	1 740	1 583	1 387	1 424	1 538
Murray	2 223	2 178	1 705	1 952	2 151
South East	5 719	4 986	4 376	4 409	4 685
Eyre	2 723	2 625	2 227	2 363	2 549
Northern	2 003	2 007	1 816	1 977	2 169
Far North	1 782	1 827	1 834	1 836	1 895
Total	19 166	17 970	15 651	16 431	17 621

# Number of Rural Holdings Classified by Size of Sheep Flock: Statistical Divisions, South Australia At 31 March, 1974

Number of Sheep			Stat	istical Divi	ision			Total
in Flock	Adelaide	Central	Mount Lofty Ranges	Murray	South East	Eyre	Northern	(a)
				Number of	of Holding	;s		
1- 99 100- 499 500- 999 1 000- 1 499 2 000- 2 999 3 000- 4 999 5 000- 9 999	272 122 31 13 3 4 1	165 724 805 348 116 66 23	671 744 465 229 105 69 47	221 628 776 355 145 99 47	403 412 487 421 305 382 230 109 23	74 201 674 521 225 185 63 14	110 379 526 291 156 123 74 30	1 928 3 261 3 843 2 258 1 137 1 027 567 252 70
20 000 and over		_			3		ĭ	22
Total flocks	448	2 249	2 340	2 282	2 775	1 958	1 695	14 365

<sup>(</sup>a) Includes Kangaroo Island and Far North Divisions.

At 31 March 1975, 24 per cent of the total sheep population consisted of lambs and hoggets under one year. The proportion of lambs to sheep has remained fairly constant for a number of years although it is subject to some fluctuations.

Age and Sex of Sheep, South Australia
At 31 March

Year	Rams	Breeding Ewes	Other Ewes	Wethers	Lambs and Hoggets (under one year)	Total Sheep
			'(	000		
969	228	8 874	706	4 646	3 938	18 392
970	234	9 183	857	4 789	4 684	19 747
971	240	9 223	1 021	4 657	4 025	19 166
972	230	8 944	786	3 989	4 021	17 970
973	212	8 004	641	3 187	3 607	15 651
974	215	8 417	536	3 430	3 832	16 431
975	227	8 648	707	3 820	4 217	17 621

# Breeds of Sheep

The predominant breed in South Australia is the Merino which accounts for more than 86 per cent of the total sheep numbers. The South Australian Merino having a robust constitution and a capacity to travel long distances to water has adapted well to the hot, dry conditions of the interior.

Breeds of Sheep, South Australia
At 31 March

Breed	1968	1969	1970	1971	1974
			'000		
Merino	13 418.1	15 275-1	16 749.3	16 304-1	14 212.0
Corriedale	1 113.0	1 085.3	973.1	940∙6	646.2
Dorset Horn Poll Dorset	<b>58.9</b>	62.0	67-4	77.9	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Border Leicester	37.5	32.3	29.6	27-7	25.8
Polwarth	113-9	114-1	139-6	147.6	137-3
Romney Marsh	25.7	26.6	21.1	17.6	11.4
Rveland	5.7	7·1	6.7	5.7	4.0
Southdown	7⋅8	5.3	4.9	4-7	3.1
Suffolk	17-0	16.9	14.9	18-4	19.0
Other	3.1	4.3	3.8	4.3	7.7
Merino-Comeback	213.6	198.8	168-4	214.7	133.6
Crossbred	1 391.0	1 564-3	1 568-3	1 402.6	1 149-3
Total	16 405-3	18 392-1	19 747-1	19 165-8	16 430-9

Of the remaining recognised breeds, the Australasian breeds, Corriedale and Polwarth, are most important. These are dual purpose sheep, used for mutton and at the same time producing wool of good quality. The Corriedale is a fixed cross between Lincoln rams and Merino ewes while the Polwarth is a fixed comeback bred from the mating of Merino rams with Lincoln-Merino ewes.

British longwools (Border Leicester, Cheviot and Romney Marsh) are used for mating with the Merino or crossbred ewes mainly to produce fat lambs but useful types of comeback and crossbred wools, are also yielded. British shortwools (Dorset Horn, Ryeland, Suffolk, Southdown and Shropshire) are used principally for production of export lambs.

# Lambing

In 1969 a record 8 598 000 ewes were mated and the number of lambs marked totalled 7 193 000. In 1974, 7 898 000 ewes were mated and the number of lambs marked was 6 427 000. Early reports from farmers indicated that they intended to mate 8.4 million ewes in 1975—approximately 5.6 million to Merino rams, 0.9 million to other longwool rams and 1.9 million to shortwool rams.

Details of lambs marked and the lambing percentage in each statistical division in 1973 and 1974 are given in the next table.

Lambing:	Statistical	Divisions,	South	Australia

Statistical Division —	Lambs N	Marked	Lambing Percentage		
Statistical Division —	1973	1974	1973	1974	
	'00	0			
Adelaide	42	42	87.60	88.04	
Central	654	736	77.20	81.00	
Kangaroo Island	196	230	65-87	72.40	
Mount Lofty Ranges	556	604	82.69	85.60	
Murray	754	849	76-42	81-11	
South East	1 702	1 815	84.65	87.05	
Eyre	707	779	70.50	74.32	
Northern	675	766	76-24	79.14	
Far North	522	605	67.38	78.63	
	5 808	6 427	77:18	81.37	

<sup>(</sup>a) Percentage of lambs marked to ewes mated.

# Sheep Shearing and Wool-clip

In the agricultural areas of the State there is a predominance of shearing during the late winter and spring months, August to November. Shearing in the South East Division occurs somewhat later, with some 75 per cent of the woolclip being obtained in the period October to November. In the northern pastoral

areas (Far North Division) there are two main seasons, March-April and July-August. The next table gives details of sheep and lambs shorn, wool-clip and average fleeceweight in South Australia for the years 1970-71 to 1974-75.

Sheep and Lambs Shorn: Wool-clip and Average Fleeceweight, South Australia

Classification	1970-71	1971-72	1972-73	1973-74	1974-75
		Num	BER SHORN	('000)	
Sheep	17 556	16 613	15 009	13 965	14 651
Lambs	4 409	4 210	3 973	3 919	4 416
Total	21 965	20 823	18 982	17 885	19 067
		Woo	OL-CLIP ('000	) kg)	
Sheep	95 035	94 792	85 353	82 314	88 965
Lambs	7 695	7 792	6 844	7 320	8 703
Crutchings	4 912	4 904	4 419	4 249	4 594
Total	107 641	107 487	96 616	93 883	102 261
		Average 1	Fleeceweigh	нт (a) (kg)	
Sheep	5.41	6.00	5.98	6.20	6.39
Sheep and lambs	4.90	5.16	5.09	5-25	5.36

<sup>(</sup>a) Includes crutchings.

The total wool-clip, including crutchings, exceeded 100 million kg for the first time in 1966-67. More than 90 per cent of the total wool is obtained from adult sheep.

The average fleeceweight in South Australia is well over 5 kg a head for adult sheep, with a record 6.39 kg a head being achieved in 1974-75. This is significantly higher than the yield obtained in other States, and is primarily because of the larger size of the South Australian Merino, its broader wool quality and longer thicker-stapled fleece.

A breakdown of the State figures for 1974-75 by statistical divisions is given in the next table. This shows the high average fleeceweight obtained in the northern pastoral areas. The relatively light average fleece obtained in the South East Division is explained partly by the lower proportion of Merino sheep in the area (at 31 March 1974 only 73 per cent of total sheep in the South East Division were Merinos, compared with a total State figure of over 86 per cent), but more importantly by the lighter wool quality of the smaller framed sheep in this area.

# Sheep and Lambs Shorn, Wool-clip and Average Fleeceweight Statistical Divisions, South Australia

#### 1974-75

Statistical Division -	N	umber Sho	orn		Wool-clip	,	Ave Fleecewe	rage eight (a)
Statistical Division -	Sheep	Lambs	Total	Sheep	Lambs	Total (a)	Sheep	Sheep and Lambs
		00		'00	0 kg		1	g
Adelaide	204	16	219	953	32	1 011	4.80	4.60
Central	1 452	355	1 807	8 924	658	10 073	6.48	5.57
Kangaroo Island	654	197	851	3 726	353	4 259	5.97	5.01
Mount Lofty Ranges	1 315	364	1 678	8 112	711	9 236	6.48	5.50
Murray	1 683	594	2 277	10 562	1 144	12 300	6.63	5.40
South East	4 006	1 232	5 238	23 550	2 452	27 148	6.16	5.18
Eyre	2 132	599	2 731	12 575	962	14 183	6.20	5.19
Northern	1 759	599	2 358	11 516	1 210	13 297	6.87	5.64
Far North	1 446	460	1 906	9 047	1 181	10 754	6.62	5.64
Total	14 651	4 416	19 067	88 965	8 703	102 261	6.39	5.36

<sup>(</sup>a) Includes crutchings.

# WOOL INDUSTRY

#### Organisation of the Australian Wool Industry

The Wool Industry Act 1962 made provision for the replacement of three separate instrumentalities (the Australian Wool Bureau, the Wool Research Committee and the Australian Wool Testing Authority) by a single body, the Australian Wool Board. The Board comprised a chairman, six woolgrower representatives, three members with special qualifications and a representative of the Australian Government.

The Australian Woolgrowers and Graziers Council and the Australian Wool and Meat Producers Federation formed the Australian Wool Industry Conference in October 1962. Principal functions of the Conference are to nominate woolgrower representatives for appointment to the Australian Wool Board; to recommend what rates of levy should be paid by woolgrowers for promotion and research, and to review the activities of the Board at least once a year. Levies had been imposed on shorn wool produced in Australia since 1936 for research and promotion purposes.

The Australian Wool Commission, a statutory authority set up by the Australian Government following proposals from the Australian Wool Industry Conference and the subsequent report of a special Advisory Committee of the Australian Wool Board, commenced operations in November 1970 and in that month began bidding and operating its flexible reserve price at wool auctions.

The Wool Industry Act 1972 repealed the Wool Industry Act 1962-1971 and the Australian Wool Commission Act 1970 and under this Act the Australian Wool Corporation commenced operations on 1 January 1973 with the combined functions of the Australian Wool Commission and the Australian Wool Board. The Wool Corporation has continued to operate the Flexible Reserve Price Scheme at auctions and to implement the policies established by the Australian Wool Commission.

#### Production of Wool

Total wool production consists of shorn wool (including crutchings) plus fellmongered wool, dead wool and wool exported on skins. Fellmongering is the process of removing wool from the pelt by bacterial action (sweating) or by treatment with chemicals. Dead wool is picked from the carcasses of dead sheep.

In 1944 the weight of wool produced exceeded 50 million kg for the first time. Production dropped significantly in 1945-46 following the reduction in flocks caused by the 1944 drought. The industry recovered quickly and in 1947-48 a record 53 million kg of wool was produced, achieved by an increase in the numbers shorn and an exceptionally high average fleece of 4.93 kg. The rising trend has since continued with current production over 100 million kg.

Before 1946-47 the annual wool value had not exceeded \$14 million and was relatively stable. The marked changes in the value of wool produced since then have been mostly because of frequent and substantial price fluctuations rather than variations in the quantity produced. On the resumption of the auction system in 1946-47 wool prices increased sharply, reaching a peak in the record 1950-51 season. Gross value of production in that year exceeded \$132 million.

Demand eased in the following years causing values to fall, although a recovery in prices combined with a significant increase in production in 1956-57 raised gross value of production to \$114 million. In 1963-64 increased wool production and somewhat higher prices than in the past few years resulted in gross value of production of \$113 million. Since 1965-66 wool production has exceeded 100 million kg each year, however wool prices have varied markedly resulting in the gross value of production being as low as \$65 million in 1970-71 and as high as \$183 million in 1973-74. Despite an increase in production, the gross value of wool in 1974-75 fell to \$125 million due to lower prices.

Wool	Production	and	Value,	South	Australia
			•		

<b>S</b>		Production		Value of
Season	Shorn Wool	Other (a)	Total	Wool Production
	'000 kg	'000 kg	'000 kg	\$'000
1965-66	96 501	7 660	104 161	103 635
1966-67	99 961	7 766	107 727	104 588
1967-68	93 252	7 749	101 002	79 925
1968-69	98 661	7 055	105 716	95 054
1969-70	115 455	9 076	124 531	91 224
1970-71	107 641	9 618	117 260	65 086
1971-72	107 487	10 435	117 922	70 093
1972-73	96 616	9 391	106 006	141 713
1973-74	93 883	6 272	100 155	183 227
1974-75	102 261	5 191	107 452	125 044

<sup>(</sup>a) Includes fellmongered wool, dead wool and wool exported on skins.

# Wool Quality and Marketing

For many years approximately 9 per cent of the wool grown in South Australia has been sold outside the auction system. This percentage rose to 13 per cent in the 1971-72 season and to 19 per cent in 1972-73, but fell to approximately

14 per cent in 1973-74, before rising to 18 per cent in 1974-75. Of the South Australian wool passing through the auction system approximately 85 per cent is received by the Adelaide selling centre with the remainder, predominantly of South Eastern origin, going to Victorian selling centres. A similar inflow of wool occurs from western New South Wales, and to a lesser extent from western Victoria.

Because of the development of a system of Objective Measurement for wool the traditional method of displaying wool for sale, whereby sample bales are opened for inspection by buyers, is declining in importance and much wool is now sold by sample. A high standard of clip preparation is required for sale by sample as there must be very little variation between the bales of wool of each grade.

When a suitable lot is received into store a core sample is taken and this is then tested to give measures of average fibre diameter (mean micron), degree of vegetable fault, and yield of wool (by three methods) and this information is entered on a certificate. As various other factors (e.g. length of wool, type of vegetable fault) must be assessed a grab sample of 8 kg is taken from each lot and this is displayed on a show floor, together with the Objective Measurement certificate, for examination by buyers.

An advantage of the Objective Measurement system of clip preparation is that the sample may be inspected at a site remote from the location of the bulk of the clip. This has enabled wool held in Adelaide stores to be inspected, and sold, in Melbourne sales, which is of particular value to growers who deliver wool in late autumn and winter when there may be six to eight weeks between sales in Adelaide.

The incidence of vegetable matter reduces the yield of all wool types. If the extent of vegetable fault is greater than 14 per cent of the wool's greasy weight the wool has to be treated by the carbonising process. In most seasons approximately 70 per cent of South Australian wool is free of, or contains only light burr and seed; almost 15 per cent contains medium or heavy burr and seed and some 10 per cent is carbonising wool.

The following tables show the quality analysis of and the incidence of vegetable fault in wool sold at auction in South Australia in recent years.

Mean Micron Classification		1971-72	1972-73	1973-74			
						Per cent	
20 and finer					0.4	1.4	0.7
21					4.1	5.2	5.8
22					10.2	17.0	10.2
23					23.6	29.9	23.5
24 25					22.8	18.7	20.8
25					15.6	11.8	15.0
26					9.6	6.3	9.7
27 to 38 .					12.4	8.4	12.0
Coarser .							_
Oddments.	• • • •	• •	٠	••	1.3	1.3	2.3
	Total				100.0	100.0	100.0

Quality Analysis of Greasy Wool Sold at Auction in South Australia

Incidence of Vegetable Fault in Wool Sold at Auction in South Australia

Season	Free or Near Free	Light Burr and/or Seed	Medium Burr and/or Seed	Heavy Burr and/or Seed	Carbon- ising Wool	Combing Oddments	Total
		Pe	rcentage of	Total Nu	mber of B	ales	
1967-68	. 28.9	45.9	12.0	2.8	9·1	1.3	100.0
1968-69	35.8	46.2	8.3	1.3	6.8	1.6	100.0
1969-70	. 28.6	45.3	11.8	2.6	10.3	1.4	100.0
1970-71	. 24.5	44.3	12.6	3.9	13.5	1.2	100.0
1971-72	37.6	36.2	9.6	3.3	12.0	1.3	100-0
1972-73	. 36.2	33.9	10.9	4.6	13.1	1.3	100.0
1973-74	. 50.2	26.4	7.4	2.2	12.2	1.6	100.0

During the main spring shearing season sales are held every two or three weeks, lengthening to monthly or longer intervals over the remainder of the year. Pastoral wools provide the bulk of the offerings in the early spring months with agricultural wools becoming more prominent as the season progresses. Wools from the South East and other high rainfall areas make up a considerable proportion of the offerings in the summer months. Towards the end of the season wools are drawn from various parts of the State.

At the Wool Exchange, the sales are conducted with great rapidity taking on average for a normal market only eight seconds to dispose of an individual lot or line of wool. On completion of the sale the bales are returned to the stacks to await instructions from the buyers. When required for shipment the bales are usually dumped, *i.e.* pressed to less than half their original size and banded, to economise on shipping space.

Details relating to Adelaide wool sales during the past eight seasons compared with 1950-51, the year of boom prices, are shown in the following table.

Adelaide Wool Sales

Season		Wool (Scoured a		Amount Realised	Average Pric Per Kg (Greasy)	e In Store at End of Season
		Bales	Weight	Realiseu	(Greasy)	End of Season
		Number	'000 kg	\$,000	Cents	Bales
1950-51		383 630	53 086	125 956	237-28	6 304
1967-68		573 490	82 642	68 486	82.87	39 517
1968-69 1969-70	• •	575 532 742 575	84 432 107 731	77 478 80 823	91·76 75·02	73 998 27 042
1970-71	• •	613 305	88 882	53 106	59·74	24 670
1971-72		672 056	99 133	71 585	72-21	24 675
1972-73		521 187	75 862	135 087	178.07	12 693
1973-74		487 336	74 249	131 078	176-54	30 582
1974-75		563 483	84 962	102 054	120.12	22 762

#### Wool Prices

Prices paid for wool sold in South Australia tend to be on average less than prices realised in other States, this being partly attributable to the large proportion of medium to broad quality wools grown in South Australia and in western New South Wales. In 1974-75 the average price for wool sold at auctions in Australia was 126.99 cents per kg greasy, compared with 120.12 cents per kg in South Australia.

Average prices realised for greasy wool at Adelaide sales between 1945-46 and 1949-50 rose to 106 cents and more than doubled to nearly 239 cents in 1950-51. There was an immediate drop to half this level in the following year and then prices remained more stable until 1967-68. In 1970-71 the average price fell to 60 cents per kg, but in 1971-72 prices began to rise, reaching a monthly average of 253 cents per kg in July 1973. The price of wool has declined somewhat since then.

#### CATTLE

In comparison with other States, cattle grazing is not a major industry in South Australia. Of the cattle in Australia at 31 March 1975 just over 5 per cent of those used mainly for meat production and about the same percentage of those for milk production were in South Australia. At 31 March 1975 the total number of cattle in South Australia was 1869 000.

Cattle Numbers: Statistical Divisions, South Australia
31 March 1975

	Statistical Division							
Classification	Central	Mount Lofty Ranges	Murray	South East	Eyre	Northern	Far North	Total
Associated with milk				'0	00			
production: Bulls (b)	0.3	1.5	0.6	1.1	0.1	0.2		4.0
^	4.7	61.7	26.0	31.9	1.2	2.8	_	4·0 134·8
Heifers	1.6	16.6	26·0 6·6	8.9	0.3	0.9		36.3
Calves under one year	1.6	13.8	6.5	8.3	0.4	0.9	_	33.0
House cows	0.8	1.0	0.9	1.4	1.3	0.9	0.1	33.0
House cows ,	0.0	1.0	0.9	1-4	1.3	0.7	0.1	0.9
Total	8.9	94.6	40.7	51.7	3.2	5.5	0.2	214-9
Associated with meat production:								
Bulls (b)	2.0	4-1	2.4	17.8	2.3	1.8	3.8	35.5
Cows and heifers	49.7	86.3	61.3	436.1	65.2	40.4	116.9	897-1
Calves under one year	27.9	48.3	40.0	245.2	39.8	24.4	60.0	508⋅0
Other cattle	8.7	21.2	10.3	111.8	9.8	8.2	34.5	213.2
Total	88-4	160-0	114.0	810-8	117.0	74.7	215-2	1 653 8
Total cattle	97.3	254.5	154.7	862-5	120-3	80.2	215-4	1 868-7

<sup>(</sup>a) Includes Adelaide and Kangaroo Island Divisions.

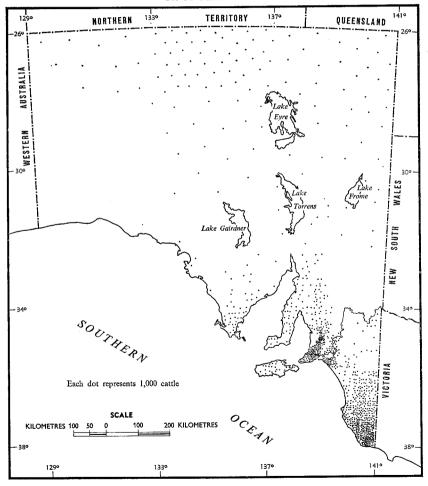
<sup>(</sup>b) Used or intended for service.

# Cattle for Meat Production

Numbers of cattle associated with meat production have increased in the last twelve years in South Australia. At 31 March 1964, 424 000 cattle associated with meat production were recorded (this figure is not strictly comparable with earlier figures because of a change of classification adopted in 1964); by 31 March 1968 this number had risen to 464 000 and at 31 March 1975 there were 1654 000 cattle for meat production.

# SOUTH AUSTRALIA CATTLE DISTRIBUTION

At 31 March 1970.



In 1975 about 49 per cent of these cattle were in South East Division, 13 per cent in Far North Division, 10 per cent in Mount Lofty Ranges Division, and smaller numbers in other parts of the State. In the northern pastoral areas, Shorthorns are the predominant breed and there are lesser numbers of Herefords; in the South East, Herefords and Shorthorns are the main breeds and there are substantial numbers of Aberdeen Angus while near Adelaide, where a number of studs are located, several breeds are well represented. In recent years several European breeds have been introduced, most notably the Charolais.

The northern pastoral region is traditionally the breeding area for cattle for meat production (carrying 50 per cent or more of these cattle before 1957) but there has been a trend towards moving cattle which were bred in this drier country to the better rainfall areas for fattening. The continued increase in the area of sown pastures has contributed to the increase of cattle in southern parts of the State.

#### Cattle for Milk Production

From March 1964 to March 1968 the total number of cattle associated with milk production declined by 39 000 to 231 115 and the total number in subsequent years has been of the same order. Distribution within the State is little changed although there has been some tendency for concentration in the principal dairying areas.

Properties in South Australia on which dairying is the main activity are situated mainly in the areas where high rainfall or irrigation permits the growing of sown pastures, but many of the mixed farms in the better cereal growing areas carry herds used mainly for milk production. Dairy production on these farms is almost entirely in the form of cream for butter making, whereas the properties in the sown pasture areas mainly market whole milk, either for consumption in the Adelaide area or for cheese making.

Commercial dairying activities are located mainly within a 130 kilometre radius of Adelaide. Of greatest importance is the Adelaide Hills district, comprising the Mount Lofty Ranges and areas as far south as Cape Jervis and Encounter Bay. This district embraces some of the best dairy land in the State and includes most of the properties devoted specifically to dairy farming. Although some herds are grazed on natural pastures improved only by top dressing with superphosphate, the most common pasture consists of a sown combination of subterranean clover with perennial grasses such as perennial rye grass or phalaris.

Dairy production is mainly in the form of whole milk for consumption in Adelaide but the surplus from the flush period of the year is converted into cheese at factories situated at several centres throughout the Adelaide Hills.

Of the breeds used mainly for milk production, Friesians and Jerseys predominate, with Guernseys, Australian Illawarra Shorthorn, Ayrshires and their crosses in use to a lesser extent.

Other areas inside the 130 kilometre radius are the Lower Murray swamps and the Lakes District. The Lower Murray swamps extending from Mannum to Wellington are reclaimed areas ideally suited to dairying pursuits, combining the

attributes of suitable climate, good soil, and an abundant water supply. The farms are flood irrigated through sluice gates in the levees and distributing channels and surplus water is led into a drainage system and pumped back into the river. The area has a very high carrying capacity of predominantly Friesian cattle. A significant proportion of the produce is sold as whole milk in the Adelaide market while the remainder is used for cheese, butter and casein production.

The Lakes District owes much to the barrages across the mouth of the Murray which have helped to maintain the waters of Lake Alexandrina and Lake Albert in a reasonably fresh state. These have greatly contributed to the improvement of the productivity of this area and also have had the effect of maintaining a greater control over the level of the water in the river, thereby greatly facilitating irrigation of the reclaimed swamps upstream. The outlet for dairy products is generally towards the processing plants situated on the Murray. On the eastern side both cream and milk are produced while on the western side most of the produce is sold as whole milk. The cattle for milk production are principally Jersey breed.

Outside the 130 kilometre radius, the most important dairying area is the Lower South East, where the high rainfall and low evaporation rate combine to allow a fairly long growth period after the autumn and winter rains and spring flush of feed. The intensity of dairying varies with the different areas, being greatest on the richer peat and peat-type soils close to the coast and the rich volcanic soils around Mount Gambier. Most breeds are well represented in the district, the Jersey and Friesian being slightly more popular than other breeds.

The annual average yields per cow shown in the table below are obtained by dividing the total production of whole milk for the year ended 31 March by the mean of the number of cows in milk and dry and the house cows at 31 March of that year and of the preceding year. They are, in effect, based on the approximate number of cows which were in milk during any part of the year. The average shown is therefore less than that for cows which were yielding during the greater part of the year but it may be accepted as sufficiently reliable to show the general trend.

Average Milk Production Per Cow, South Australia and Australia Year Ended 31 March

Area	1971	1972	1973	1974	1975 p
			Litres		
South Australia	3 262	3 117	2 806	3 120	3 045
Australia	2 657	2 590	2 611	2 629	2 611

The average yields shown in this table are greatly in excess of the yields recorded before 1960. This increased production has been achieved through a more scientific approach to management of herds for milk production including

the keeping of detailed herd records, selective breeding and culling, supplementing the traditional diet of pasture, hay and silage with highly nutritious prepared feedstuffs, and the use of modern veterinary supplies and services. The continuing trend towards fewer but larger dairy farms reflects the pressures on the industry to achieve greater efficiency. At March 1966 there were 10 046 holdings with cattle used or intended to be used for milk production, but by March 1974 the number had fallen to 3 985.

#### DAIRY PRODUCE

#### Milk

Total milk production in any one year is not known precisely. However, as details are known of two major components of total milk utilisation in South Australia, namely the amount consumed by factories in the production of milk, cheese, butter and other milk products and home consumption in the Metropolitan Milk Board area, a carefully considered estimate can be made.

The following table shows the estimated production of whole milk and the quantity of this milk used for various purposes in 1965-66 and later seasons.

Production	and	Litilisation	of	Milk.	South	Australia
HOMETHOR	anu	CHISAGOL	vı	IVIII III.	South	Austrana

				Milk U	Jsed for		
Year		Total Milk	Butter (a)	Factory		ome mption	- Other
10	ai.	Produced	Dutter (a)	Cheese (b)	Outside Milk Milk Board Board Area Area		Purposes
				'000	litres		
1965-66		 447 326	142 534	162 109	88 912	45 129	8 633
1966-67		 448 822	135 719	171 433	88 476	44 461	8 733
1967-68		 403 793	109 352	149 785	90 131	46 097	8 428
1968-69		 467 374	130 268	192 959	90 154	45 625	8 374
1969-70		 482 958	154 612	180 234	94 118	45 161	8 838
1970-71		 469 775	130 655	190 490	95 486	43 802	9 342
1971-72		 457 732	126 095	185 835	94 722	41 674	9 406
1972-73		 424 265	101 865	174 500	96 222	41 708	9 969
1973-74		 438 829	101 648	190 465	95 389	41 346	9 980
1974-75	• •	 426 371	89 458	194 335	91 828	39 917	10 833

<sup>(</sup>a) Includes factory and farm production of butter.

The Metropolitan Milk Board is constituted to regulate the treatment and marketing of milk within the Metropolitan Milk Board area. The duties of the Board include the fixing of the metropolitan producing district and the granting of milk producers and treatment licences. The Board may fix the prices of milk and sweet cream and may make recommendations on the quotas of milk and cream for sale.

<sup>(</sup>b) Factory production accounts for virtually all cheese produced.

#### **Butter and Cheese**

The quantities of butter and cheese produced during the last ten years are shown in the following table.

Rutter	and	Chanca	Production.	South	Auctralia
Duner	ano	uneese	Production.	Soum	Austrana

Year	Butter (a)	Cheese (b)	Year	Butter (a) Ch	ieese (b)
	,000	kg		'000 k	g
1965-66	7 405 6 915 5 566 6 637 7 883	16 457 17 508 14 866 19 151 17 888	1970-71 1971-72 1972-73 1973-74	6 430 5 194 5 194	18 906 18 444 17 319 18 904 19 288

<sup>(</sup>a) Includes factory and farm production.

#### **PIGS**

In South Australia pigs were normally kept as a sideline on mixed farms or in conjunction with dairy cattle but the trend is towards holdings specialising in pigs.

Although there have been substantial fluctuations in the pig population from year to year induced by the exceptional variability of prices, in the long-term the numbers have remained stable. The total number exceeded 200 000 for the first time in 1966 and has continued to exceed that number in subsequent years. Of the 349 000 pigs at 31 March 1975, approximately 55 per cent were in Central and Murray Divisions. The principal breeds in South Australia are Large White, Berkshire, Landrace and Tamworth. The following table shows the number of pigs on rural holdings at 31 March for the last five years.

Pig Numbers, South Australia

At 31 March							Boars	Breeding Sows	All other	Total
1971	•••					 	 5 521	49 560	334 336	389 417
1972							6 526	62 881	409 467	478 874
1973						 	 6 113	57 711	435 637	499 461
1974							4 996	46 000	334 162	385 158
1975							4 664	44 318	299 973	348 955

In the following table, rural holdings with pigs at 31 March 1974 are classified according to the size of the pig herd and the number of breeding sows. Of the 28 738 holdings of all types 4 878 carried pigs.

<sup>(</sup>b) Factory production only.

Rural Holdings Classified According to Number of Breeding Sows and Size of Pig Herd: South Australia, 1973-74(a)

Numbe	f			Holdings with				
Breeding		'S	1-9	10-19	20-49	50-99	100 and Over	Breeding Sows
1-4			283	358	538	79	5	1 263
5-9			27	67	497	501	44	1 136
10-19				11	83	339	340	773
20-49			_		5	27	359	391
50-99					_	1	112	113
100 and ove	er	• •	-			_	26	26
Total			310	436	1 123	947	886	3 702

<sup>(</sup>a) 1 176 holdings with pig herds carried no breeding sows.

# MEAT PRODUCTION AND MARKETING

South Australia is a relatively small meat producer, providing only about 8 per cent of total Australian production. The South Australian Meat Corporation has the sole right within the Metropolitan Abattoirs area to slaughter stock for export as fresh meat in a frozen condition. It controls the handling and distribution of meat within this area and may fix the maximum number of stock sold in any one day in a Corporation controlled market. The following table shows the number of livestock slaughtered for human consumption (including exports) and the production of meat during the last five years. Slaughterings and meat production on rural holdings are included in these figures.

# Livestock Slaughtered and Meat Produced, South Australia

Season		ock Slaugh nan Consu		Meat Production (Bone-in-Weight)						
Some	Cattle and Calves	Sheep and Lambs	Pigs	Beef and Veal	Mutton and Lamb	Pigmeat	Total			
	-	'000			Ton	ines				
1970-71	264	5 101	435	43 494	91 923	22 537	157 954			
1971-72	. 291	5 144	436	50 068	91 503	23 094	164 665			
1972-73	. 392	4 538	527	64 254	76 262	27 483	167 999			
1973-74	359	2 595	448	63 211	50 116	24 195	137 522			
1974-75	465	2 984	344	84 649	54 818	18 699	158 166			

Average market prices of some of the principal classes of livestock are set out in the next table. Generally prices fluctuate considerably from year to year, but a comparison of prices for 1973 and 1975 shows a dramatic fall.

Livestock, Average Prices at Adelaide Market

Class of Stock	1971	1972	1973	1974	1975
Fat cattle:			Dollars		
Bullocks and steers;					
Prime, medium	155.00	153.63	191.63	139-51	82.81
Good´	135.80	131.80	161.89	117.28	69.49
Cows;					
Prime, medium	131.10	128.14	162.92	116.93	53.49
Good	113.21	108.73	140.11	101.93	34.56
Calves:					
Prime vealers	56.75	49.29	60.44	66.56	30.97
Good	40.55	34.92	48.51	52.34	22.21
Fat sheep:	-10 55	3174		· · ·	
Merino wether;					
Prime	4.28	6.35	18.15	12.67	6.23
Medium	3.15	4.42	13.05	10.14	3.91
Lambs;	3 13	2	15 05	10 1 .	
Prime, medium	5.66	6.56	14.16	12.30	9.64
Good	4.31	5.07	11.85	9.92	6.01
Pigs:	731	501	11 03	, , _	001
Choppers	69.68	61.26	72.10	120.85	125.28
Baconers	39.76	34.63	42.69	67.95	68.40
Porkers	23.67	20.68	25.45	37.66	40.65
101R010	25 01	20 00	23 43	2.00	.0 03

The Australian Meat Board, which was reconstituted under the *Meat Industry Act* 1964 controls the export of meat, its sale and distribution overseas, and advises on matters relating to quality and grading of meat for export. The trading powers of the Board enable it to purchase and sell meat in its own right for the purpose of developing existing markets or creating new markets where there are special problems or circumstances which preclude the effective participation of private traders.

Finance for the Board's operations is derived from a levy imposed under the Livestock Slaughter Levy Act 1964-1974. The levy is payable on the slaughter of all cattle (over 90 kg dressed weight), sheep and lambs for human consumption. The Act provides three elements in the levy for each class of livestock—an amount to finance meat research, an amount to finance the operations of the Australian Meat Board and, from 1 January 1972 until 31 December 1974, an amount to finance service and investigation activities relating to meat processing. The first two elements are paid by producers while the third element is paid by meat processors.

In February 1964 the Governments of Australia and the United States concluded an agreement for the regulation of beef, veal and mutton exports from Australia to the United States with the object of promoting the orderly development of the trade in these classes of meat between the two countries. From year to year quotas on imports of meat may be imposed depending on the estimated level of imports into the United States.

#### OTHER RURAL INDUSTRIES

# **Poultry Farming**

Poultry farming is a specialised and distinct industry and it is from this source that the bulk of commercial production is obtained. The industry can be divided into two categories; the production of eggs, and the raising of poultry for meat. Chickens, scientifically bred for rapid weight gain and known as 'broilers', account for over 90 per cent of total poultry slaughtered.

The main production centres for both categories of this industry are located within an 80 kilometre radius of Adelaide, near the processing works and main consumption outlets. Particular concentrations of growers are at Murray Bridge and Gawler, with some broiler growers established in the Adelaide Hills.

# Poultry Industry, South Australia (a) At 31 March

Particulars	1971	1972	1973	1974	1975
			'000		
Hens and pullets	1 848	1 899	1 558	1 671	1 716
Other fowls and chickens	1 885	1 993	2 332	2 728	2 476
Ducks	75	47	26	23	29
Turkeys	73	40	33	17	13
Egg production (b)		249 618	225 220	216 409	227 382

<sup>(</sup>a) Excludes poultry kept in backyards,

# Egg Industry

The South Australian Egg Board, operating under the Marketing of Eggs Act, 1941-1973, controls the marketing of eggs in this State. The Board determines the price at which it purchases eggs from producers, fixes the wholesale selling price in South Australia, makes available supplies to the local market through its grading agents and arranges with the Australian Egg Board for the export of eggs surplus to local requirements.

A stabilisation scheme, embodying three Acts has been in operation since 1 July 1965. The Poultry Industry Levy Act 1965-1966 provides for the imposition of a levy, the maximum being \$1.00 annually per hen, on hens not less than six months old kept for commercial purposes. Exemptions from payment are granted on the first twenty hens in each flock and on 'broiler breed hens'. In determining the rate of the hen levy, the Australian Minister for Primary Industry is required to take into consideration any recommendations by the Council of Egg Marketing Authorities of Australia (CEMAA) which consists of all members of State egg marketing boards and is precluded from prescribing a rate in excess of such recommendations. The money obtained from the levy is used to meet trading losses on surplus eggs and sales to overseas markets.

Under the Poultry Industry Levy Collection Act 1965-1966 the South Australian Egg Board is responsible for the collection of the levy on behalf of the Australian Government. The Poultry Industry Assistance Act 1965-1966

<sup>(</sup>b) Recorded by the South Australian Egg Board. Year ended 30 June.

established a Poultry Industry Trust Fund for the receipt of the amount of the levy and other moneys. The Act provides for the payment from the Fund to this State, by way of financial assistance of such amounts as the Minister of Primary Industry may determine upon the recommendation of the CEMAA.

The trend in the egg industry in South Australia is towards a reduction in the total number of poultry farms, but an increase in average flock size. Housing of birds for commercial purposes is largely planned on the intensive principle, with deep litter pens or single and multiple bird cage units. Laying stock consists mainly of a specially produced crossbred between the White Leghorn and Australorp breeds.

Feed is the single most important cost to this industry, and its correct use is vital for efficient production. Feeding is based on cereal grains and the byproducts bran and pollard. Meat and bone meats are a major source of protein supplement coupled with other essential vitamins, proteins and minerals.

The annual average egg production controlled by the South Australian Egg Board was 10.6 million dozen in the five years ended 1960-61, 10.1 million dozen over the next five years and 15.4 million dozen in the five years ended 1970-71. However, these figures do not take into account movement of eggs interstate independently of the Egg Board, which may represent a significant proportion of total egg production.

# Broiler Industry

The broiler industry in South Australia has grown rapidly during the past sixteen years, annual production increasing from about half of a million birds in 1959 to over 15 million birds at the present time. Broilers are specially bred meat strain birds of either sex, that are slaughtered between eight and ten weeks of age at a live weight of approximately 1.5 kg. This rapid growth and efficient conversion of feed to meat has been achieved by extensive breeding programs; the use of specially prepared high protein and energy value poultry feeds; growth promotion and disease control drugs; and by the development of enclosed, factory-like broiler houses, with controlled temperature, ventilation and light, conducive to fast growth.

The broiler industry is a complex system requiring close co-operation between all links in the chain of production. Breeders, multipliers, hatcheries, growers, and poultry processors must combine to ensure efficient and streamlined production. This co-operation has produced a stable and efficient industry, bringing chicken meat to the consumer at a price comparing favourably with other meats. Growers are usually under contract to large broiler processing organisations receiving a price per bird at marketing or a price per kg live weight. Price per kg live weight is the most popular method; under this method the grower provides the shed, equipment and labour and the processor provides the chicken, cost of brooding, feed and medication. Usually the processor has a field serviceman who looks after his interests and ensures that growers are correctly rearing and caring for the stock. Nearly all South Australia's production is consumed locally, with some broilers being imported from Victoria and New South Wales.

A monthly collection of statistics on chicken hatchings and poultry slaughterings commenced in South Australia in July 1966; the following tables show the number of eggs set, chicks hatched and poultry slaughtered for the last five years.

1974-75 . . . 20 448

4 260

# Eggs Set and Chicks Hatched in Commercial Hatcheries South Australia

			Chicks H	latched (b) and	Intended to	be Raised for:
Year	Eggs :	Set (a)	Chicken Meat		Egg Production	Breeding (d)
I cai	Meat Strains	Egg Strains	Meat Strains: Unsexed	Egg Strains: Cockerels (c)	Egg Strains: Pullets (c)	Egg Strains: Pullets and Cockerels
1970-71	11 001	5.005	0.100	'000	0.105	
1970-71	. 11 891	5 885 4 933	9 100 10 431	300 117	2 125 1 876	57 30
1972-73	. 13 233	3 739	10 431	103	1 408	47
1973-74	. 17 529	4 842	13 384	95	1 770	25

16 089

65

1 723

13

# Poultry Slaughtered for Human Consumption South Australia (a)

Period	Chickens (Broilers, Fryers, or Roasters)	Hens and Stags	Ducks and Drakes	Turkeys	Total
		Number S	SLAUGHTERED	('000')	
1970-71	7 894	341	50	23	8 308
1971-72	9 887	502	45	10	10 443
1972-73	11 124	438	41	17	11 620
1973-74	13 553	521	43	7	14 124
1974-75	15 249	524	24	7	15 805
	Live Wei	сит ог Ро	ULTRY SLAUG	HTERED (T	onnes)
1970-71	12 344	762	148	138	13 392
1971-72	15 446	1 182	118	64	16810
1972-73	17 258	1 010	110	97	18 475
1973-74	21 455	1 208	117	35	22 816
1974-75	24 248	1 227	71	42	25 588
	Dressed Wei	сит ог Рос	LTRY SLAUGH	TERED (To	nnes)(b)
1970-71	8 998	528	101	104	9 730
1971-72	11 077	800	84	46	12 006
1972-73	12 363	677	79	71	13 190
1973-74	15 164	832	86	25	16 108
1974-75	16 773	834	51	31	17 689

<sup>(</sup>a) Excludes geese slaughtered.

<sup>(</sup>a) Including eggs which failed to hatch. (b) Excluding chicks destroyed. (c) Egg strain chicks sold as 'unsexed' have been allocated equally between chicks for chicken meat and chicks for egg production. The number so reported was 69 000 in 1970-71; 70 000 in 1971-72; 66 000 in 1972-73; 55 000 in 1973-74; and 69 000 in 1974-75. (d) Details of meat strain chicks for breeding purposes are not available for publication.

<sup>(</sup>b) Dressed weight of whole birds, pieces and giblets as reported by producers.

#### Beekeeping

Beekeeping in South Australia is a small industry—in 1974-75 there were 978 'keepers with five or more hives. Most commercial apiarists operate on a migratory basis, following the flowering of the various species of honey flora. The production of honey and beeswax fluctuates considerably from year to year, depending upon seasonal conditions.

Season Beekeepers			ves	Tromove	Yield of	D	
Season	Beekeepers	Productive	Un- productive	Honey Produced	Honey per Productive Hive	Beeswax Produced	
	No.	No.	No.	'000 kg	kg	'000 kg	
1970-71	805	67 267	13 583	3 190	47	46	
1971-72	821	73 412	14 055	4 277	58	60	
1972-73	867	77 852	17 142	3 357	43	57	
1973-74	894	84 944	16 730	4 650	55	76	
1974-75	978	89 464	18 909	5 510	62	97	

<sup>(</sup>a) Excludes particulars for producers having less than five hives.

#### VALUE OF AGRICULTURAL PRODUCTION

The value of agricultural production may be expressed in terms of gross value, local value and net value. Gross value is the value placed on recorded production at the wholesale prices realised in principal markets. Local value equals the gross value of production less marketing costs, and net value of production equals local value less the value of materials used in the process of production.

Details for the last five years of gross value of agricultural production are given in the following table.

Gross Value of Agricultural Production, South Australia

Class of Production	1970-71	1971-72	1972-73	1973-74	1974-75 p
			\$'000	4	
Crops (including pastures) Livestock slaughterings Livestock products	81 421	213 206 93 057 124 440	177 768 126 633 198 914	386 377 164 997 214 779	428 253 104 293 169 379
Total agriculture	347 038	430 704	503 315	766 153	701 925

# 9.2 MINING, FORESTRY AND FISHERIES

# MINING

South Australia has a well developed mineral industry and, although iron ore is the major product, the State also has very large resources of industrial minerals which make up a significant proportion of the total annual value of mineral production which exceeded \$125 million in 1974-75.

#### MINING ADMINISTRATION

The Mining Act, 1971-1975 reserves all minerals to the Crown and regulates and controls all mining operations in South Australia.

The state and conditions of the mine, machinery, ventilation, and all other matters relating to the safety, health and well-being of the employees and general public are regulated by the Mines and Works Inspection Act, 1920-1970.

The Petroleum Act, 1940-1971 and the Petroleum (Submerged Lands) Act, 1967-1969 provide for the control of petroleum exploration and the production, conservation and distribution of petroleum by pipeline.

The Underground Waters Preservation Act, 1959-1975 provides for the control of water boring and of groundwater usage in 'defined areas', and for the licensing of drillers.

The administration of these Acts is the responsibility of the Minister of Mines and Energy and the Director of Mines. The principal functions of the Department of Mines are:

- (i) the administration of mining and petroleum legislation including the granting of mineral leases and collection of royalties and fees;
- (ii) geological and geophysical investigations to ascertain the extent and nature of the State's mineral resources;
- (iii) drilling to test mineral deposits, petroleum reserves and underground water supplies;
- (iv) development of sub-surface water supplies for farming, pastoral, irrigation and mining purposes;
- (v) control of development of underground water in certain defined areas;
- (vi) the testing and treatment of minerals, generally in arrangement with the Australian Mineral Development Laboratories;
- (vii) control of mining and rehabilitation.

# MINERAL INDUSTRY STATISTICS

Mining industry data (such as employment, costs, value of output, etc.) have been obtained annually since 1952 from the Mining and Quarrying Census carried out in association with the Department of Mines. The details have been collected from establishments employing, on the average, four or more persons during the period worked by the mine. For smaller mines employing less than four persons particulars were compiled from data made available by the Department of Mines. Statistics compiled from these Censuses have been published by the Australian Statistician in Non-rural Primary Industries bulletins and other publications of the Australian Bureau of Statistics.

In 1968 and earlier years, the annual Mining and Quarrying Census related to years ended 31 December. However, commencing with 1968-69, the Mining Census was changed to a year ended 30 June to conform with the period covered by other economic censuses in Australia.

Because the 1968-69 Census differed from previous censuses, the statistics obtained from it and subsequent censuses are not strictly comparable with statistics of the mining industry which have been published for previous years. Statistics for 1968-69 to 1973-74 have been published by the Australian Statistician in the bulletins *Mining Establishments*, *Details of Operations* (Reference No. 10.60).

#### Number of Establishments

The following table shows the number of establishments which operated during the year 1973-74. These relate to mining establishments as such and do not include the numbers of separately located administrative offices and ancillary units.

Mining Establishments: Number Operating, Persons Employed, Wages and Salaries, by Industry Subdivision, South Australia, 1973-74

Industry Subdivision	ASIC Code			Persons Employed (b)		
industry Subdivision	(a)	Operating at 30 June 1974	Males	Females	Total	- and Salaries
No. of the second		7 >				\$ million
Metallic minerals	11	í }	1 453	150	1 603	9.9
Crude petroleum including natural gas	13 14	_1 )	***			• •
Construction materials	14 15	53 24	501 348	13 14	514 362	2·8 2·4
-						
Total mining, excluding services to mining		86	2 302	177	2 479	15-1

<sup>(</sup>a) Australian Standard Industrial Classification.

#### **Employment**

The statistics of the number of persons employed relate to working proprietors at the end of June 1974 and employees on the payroll of the last pay period in June 1974, including those working at separately located administrative offices and ancillary units in the State. Note that persons employed in South Australia (and their wages and salaries) relate to those employed at establishments, administrative offices or ancillary units located in this State, even though the administrative offices or ancillary units may have served establishments located in another State.

#### Wages and Salaries

The wages and salaries of all employees of the establishment include those working at separately located administrative offices and ancillary units in the State. Drawings of working proprietors are not included.

<sup>(</sup>b) At 30 June 1974; includes working proprietors.

# Turnover

The following table shows sales of minerals and other goods, whether produced by the establishment or not, plus transfers out of minerals and other goods to other establishments of the same enterprise, plus bounties and subsidies on production, plus all other operating revenue from outside the enterprise (such as commission, repair and service revenue) plus capital work for own use, or for rental or lease. Receipts from rents, leasing, interest (other than hire-purchase), royalties and the sale of fixed tangible assets are excluded.

Mining Establishments: Turnover and Value Added by Industry Subdivision, South Australia, 1973-74

Industry Subdivision	ASIC	Tuesdayes	Stock 30 J		Purchases, Transfers in	Value
industry Subdivision	Code (a) Turnover 1973 1974		Selected Expenses	Added		
No. 11				\$ millio	on	
Metallic minerals  Coal  Crude petroleum including natural	11 12	83.2	7.0	7.8	31.8	52.3
gas	13 14 15	12.9 14.2	0·9 1·5	1·3 1·8	4·7 7·5	8·6 6·9
Total mining, excluding services to mining		110-3	9•4	10.8	43.9	67.8

<sup>(</sup>a) Australian Standard Industrial Classification.

# Purchases, Transfers In and Selected Expenses

These figures include purchases of electricity, fuels, stores and other materials, plus transfers in of goods from other establishments of the same enterprise, plus charges for processing and other commission work and payments to mining contractors, repair and maintenance expenses, outward freight and cartage, motor vehicle running expenses and sales commission payments.

#### Stocks

Figures include all the stocks of materials, fuels, etc., and mine products and work-in-progress of the establishment whether located at the establishment or elsewhere.

#### Value Added

Value added as shown in the preceding table is calculated as turnover plus increase (or less decrease) in the value of stocks, less purchases, transfers in and selected expenses.

# MINERAL COMMODITY STATISTICS

Mineral commodity statistics published in the South Australian Year Book are those recorded by the Director of Mines. The quantity and value of production of the major minerals for the years ended 30 June 1974 and 1975 are listed in the following table.

#### Mining and Quarrying Production, South Australia (a)

Mineral	Unit of	Quantity		Value	
Mineral	Quantity	1973-74	1974-75	1973-74	1974-75
				\$'	000
Metallic:					
Copper				10 529	7 562
Iron ore	'000 tonnes	6 065	5 448	53 321	48 195
Other				1 912	2 853
Non-metallic:					
Barite	'000 tonnes	6	7	96	204
Clavs	'000 tonnes		821	1 129	1 219
Coal	'000 tonnes		1 798	3 573	4 697
Dolomite	'000 tonnes		393	903	777
Gypsum	'000 tonnes		784	2 343	2 188
Limestone	'000 tonnes		1 535	2 500	2 328
Opal (b)				26 000	21 000
Salt	'000 tonnes	683	698		2 793
Talc, soapstone	'000 tonnes		16	227	344
	ooo tomics	13		636	567
Other	2000 tonno	14 402	12 989	17 547	18 998
Construction material quarrying	'000 tonnes	14 402	14 909	1/54/	10 220
Natural gas	millions of m³	1 255	1 263	(c)8 000	(c)12 250
Total	• •		• •	131 445	125 978

- (a) Quantities disposed of as recorded by the Director of Mines.
- (b) Estimated.
- (c) Value at Moomba plant outlet.

Details of mining of individual minerals are given below. Reference should also be made to Part 1.3 which contains particulars of the location of mineral resources.

#### Iron Ore

The only proven high grade iron ores of South Australia lie in the Middleback Ranges to the west of Whyalla. The ranges are composed primarily of iron-rich rocks in which occur local concentrations of high grade ore.

The Iron Monarch deposit near Iron Knob has provided the bulk of the iron ore for Australia's steel industry for many years. Production from this and the smaller deposits of Iron Prince and Iron Baron is maintained by the Broken Hill Proprietary Company Limited—in 1974-75 production was 5.4 million tonnes. The bulk of the ore is shipped to Newcastle and Port Kembla, but a proportion is exported in pellet form and some is used for the production of iron in the Whyalla blast furnaces. The molten iron is transferred from the blast furnaces to the basic oxygen steel plant, where ingot steel is produced for use in the Whyalla rolling mills.

Reserves of high grade iron ore are estimated at about 170 million tonnes. The grade of ore at more than 60 per cent iron is high by world standards. In view of the known limitation of high grade ore, the Broken Hill Proprietary Company

Limited has carried out an active exploration program, and is also planning future use of the very large reserve of low grade siliceous ores known to exist in the Middleback Ranges.

#### **Barite**

There are widespread occurrences of barite (barytes) throughout the Adelaide System rocks of South Australia. Deposits are located in a number of areas including the Mount Lofty and Flinders Ranges and the Olary district. Barite is still used in the paint and other industries, but the main use is in drilling mud for oil exploration where the grade does not have to be so high. Production of barite totalled 7 000 tonnes in 1974-75.

The company operating the Oraparinna Mine in the Flinders Ranges has been the major Australian producer of barite for some years.

# **Gypsum**

South Australian deposits contain by far the largest part of Australian reserves of gypsum. The deposits in general have been formed in coastal basins cut off from the ocean, giving rise to extensive deposits of rock gypsum. The most important coastal deposits are found at Lake MacDonnell and on Kangaroo Island. Inland deposits mainly of seed gypsum occur at Moonabie, Lake Fowler, Cooke Plains and along the Murray River. The gypsum deposits have been worked extensively over the past fifty years to provide the bulk of Australasian requirements for the plaster industry and for portland cement manufacture. Production reached 784 000 tonnes in 1974-75.

Reserves of high grade gypsum at Lake MacDonnell have been proven by the Department of Mines to exceed 500 million tonnes, sufficient to meet Australasian requirements for the plaster industry and for portland cement on the west coast of South Australia, development of the deposit has been slow. The port of Thevenard has been deepened to accommodate larger ships of up to 20 000 tonnes capacity. The value of overseas exports of gypsum from South Australia during 1974-75 amounted to \$1.3 million.

#### Salt

The semi-arid climate and high evaporation rate along much of South Australia's coastline, together with the high salinity of the gulf waters, create very favourable conditions for the production of salt by solar evaporation. In the early days the availability of sites close to cheap transport led to the establishment of solar salt works at the head of Spencer Gulf near Port Augusta and at Whyalla, at Price on the eastern shore of Yorke Peninsula, and in 1940 at Dry Creek near Adelaide. In addition several operators recover salt from shallow salt-lakes on Yorke Peninsula and elsewhere.

At present South Australia produces about 700 000 tonnes of salt annually. The industry in South Australia is capable of expansion, but the future export market appears to have been largely captured by salt development in Western Australia, where ports for very large ships are available for the export of salt.

There were no overseas exports of salt from South Australia during 1974-75. Shipments to other States, however, were greater than usual.

#### Opal

The estimated value of raw opal production was \$21 million in 1974-75. In terms of value it ranked second only to iron ore as the most important mineral produced in South Australia during 1974-75. Overseas exports of opal from South Australia during 1974-75 were reported at \$6.7 million but additional large quantities were exported through other States.

In spite of the value of opal being won at present, opal mining remains a small scale operation at Andamooka and Coober Pedy. The distances from Port Augusta to Andamooka and from Port Augusta to Coober Pedy are 290 and 630 kilometres respectively.

Mining at both centres is relatively shallow, rarely exceeding 30 metres. The extent of the opal fields is not known as there has been little systematic exploration, but it is probable that the fields will continue to yield the gem for many years.

The Department of Mines is now searching for possible extensions to the Andamooka field because of the serious reduction of production experienced from this field.

#### Talc

The principal occurrences of talc are to be found at Mount Fitton in the Northern Flinders Ranges and in the Gumeracha district. From these sources 15 842 tonnes were mined in 1974-75. The Mount Fitton talc is particularly high grade, and is in demand for use by the cosmetic industry. Lower grade material is used in the rubber, paint, and ceramics industries.

#### Coal

South Australia is deficient in bituminous coal resources and the only mining is of sub-bituminous coal at Leigh Creek. The present development of the field commenced with Department of Mines drilling operations in 1941. The Electricity Trust of South Australia assumed control of the field in 1948 and developed it as a source of fuel for the Port Augusta power station. Meanwhile testing by the Department of Mines continued for some years, proving a total of 52 million tonnes of coal available by open cut methods and a further 370 million tonnes of underground reserves. Changing economic conditions have caused these estimates to be revised to 130 million tonnes and 300 million tonnes respectively, of which approximately 30 million tonnes has been mined to date by open cut methods.

Coal production in 1974-75 was approximately 1.8 million tonnes. Almost the entire production is railed to Port Augusta for use in power generation.

# **Natural Gas**

The natural gas production in 1974-75 was 1 263 million cubic metres valued at the plant outlet at \$12.3 million.

#### Limestone and Dolomite

The combined quantity of limestone and dolomite extracted each year is approximately two million tonnes. The principal deposits mined are limestone at Rapid Bay and dolomite at Ardrossan for the steel industry; limestone at Penrice,

near Angaston, for the chemical and cement industries; lime sand from Coffin Bay for the metallurgical industry; and limestone at Klein Point for the cement industry. Details of limestone production for the years 1971-72 to 1974-75 are given in the following table.

Limestone Production, South Australia
(Excluding Limestone Used as Building Stone, Road Materials, Etc.)

Classification	1971-72	1972-73	1973-74	1974-75
		'000 t	onnes	
Flux	579	496	385	297
Cement	756	802	855	839
Chemical	327	321	366	387
Other	16	17	27	11
Total	1 677	1 636	1 633	1 535

#### Clay

South Australia possesses a wide variety of clays which are used for industrial purposes such as cement manufacture, building bricks and roofing tiles, refractory ware, pottery and ceramic purposes.

Because of the scarcity of local timber supplies, softwood excepted, much greater use is made of clay bricks for construction in South Australia than in other parts of Australia. The clay brick industry is concentrated near Adelaide.

There are also widely distributed occurrences of special clays for ceramic and refractory ware, the most noteworthy being the ball clay at Woocalla, china clay at Mount Crawford, and fire clay at Birdwood, Littlehampton, Tea Tree Gully, Booleroo Centre, and Lincoln Gap.

The Department of Mines, together with the Australian Mineral Development Laboratories, is continually engaged in investigations relating to the usage of clay deposits encountered during geological surveys throughout the State.

Details of clay production for the years 1971-72 to 1974-75 are given in the following table.

Clay Production, South Australia

Classification	1971-72	1972-73	1973-74	1974-75
		'000 t	onnes	
Brick clay and shale	679	660	700	671
Cement clay (shale)	29	43	84	91
Fire clay	25	22	27	29
Kaolin and ball clay	8	9	10	13
Pottery clay	21	20	1	17
Total	763	754	822	821

# Construction Material Quarrying

Post-war industrial expansion, accompanied by extensive housing programs and highway construction has resulted in a rapidly increasing demand for construction materials. Production of aggregate, sand and roadstone (including all building stone) was 13 million tonnes in 1974-75 compared with 2.2 million tonnes in 1947

A variety of building stones is quarried, including, Mount Lofty sandstone, a white stone which hardens in the atmosphere; Basket Range sandstone, a light coloured stone of pleasing appearance; and Mount Gambier limestone, a bryozoal limestone of the South East. Limestone deposits have also been worked at Overland Corner, Cadell and Waikerie. A quantity of granite is extracted each year and marble occurrences are worked at Angaston, Kapunda, Macclesfield and Paris Creek. The main sources of slate in South Australia are at Mintaro and Willunga. Both areas supply paving slate and a large quantity of Mintaro slate is dressed and polished as there has been a strong demand for this type of slate for use in billiard tables.

Building Stone, South Australia

Type of Stone	1971-72	1972-73	1973-74	1974-75
		'000 t	onnes	
Granite	5.0	6.0	8.6	5.0
Gravel	0.2	0.3	0.5	0.6
Limestone	23.6	24.2	23.9	16.5
Marble	6.4	4.7	7.9	7.4
Quartz	0.4	0.2	0.2	0.2
Sandstone	11.1	7.0	6.0	5.0
Slate	2.0	2.2	4.3	7.0
	48.8	44.6	51.5	41.6

Production of other construction materials is shown in the following table. The importance of limestone (predominantly for construction of roads) and quartzite (mainly in the form of crushed rock) can be seen.

Road and Other Construction Materials, South Australia

Type of Material	1971-72	1972-73	1973-74	1974-75
		'000 t	onnes	
Limestone	4 503	4 983	4 281	3 553
Quartzite	3 917	3 749	3 917	3 461
Sand	2 513	2 447	2 619	2 419
Other materials	5 735	4 240	3 533	3 514
Total	16 667	15 419	14 350	12 948

#### MINERAL DEVELOPMENTS

In October 1972, agreement was reached between the consortium of companies developing the petroleum resources of the Cooper Basin and the Australian Gas Light Company to supply natural gas to the Sydney area. Since that time development drilling and construction of facilities have proceeded and the supply of gas is expected to commence in the first half of 1976. Within the three fields currently in production namely Moomba, Gidgealpa and Big Lake, there are now 33 wells completed for production and a further four are expected to be completed before delivery to Sydney commences. Gathering systems have been expanded and modified at South Moomba and Big Lake and further expansion of the Big Lake system will be carried out in the near future. At Moomba the gas processing plant is being expanded by the addition of a fourth train and this should be completed early in 1976. Construction of the transmission pipeline to Sydney is also well advanced and this is expected to be commissioned by mid-1976.

The producer consortium have prepared a unitisation agreement which will permit the fields of the Cooper Basin to be developed in a logical and economic manner. It is backed by an indenture agreement negotiated between the producer group and the State Government and ratified by an Act of Parliament.

The Redcliffs petrochemical project based on Cooper Basin hydrocarbons and salt produced in the Port Augusta area is still under consideration.

In 1975 no exploration holes were drilled in the Cooper Basin, but some seismic survey work was carried out. Elsewhere in the State five exploration wells were drilled, one onshore in the South East and four offshore (one in the South East and three in the Great Australian Bight). No new accumulations of petroleum were discovered.

Considerable exploration is continuing for copper, uranium and other minerals, but at a reducing rate. Little interest was shown in 1974-75 in regional exploration for base metals, but there was an overall intensification of activity on fewer tenements. Seventy-three Exploration Licences were current in 1975 compared with sixty in June 1974. Interest in sedimentary uranium was maintained and a number of companies have been engaged in testing the extent of South Australia's coal and lignite resources. The amount of \$4.5 million expended on exploration areas in 1973-74 by companies holding Exploration Licences compared with \$5.3 million the previous year.

The Department of Mines spent about \$3.6 million in 1974-75 (\$3.1 million in 1973-74) on geological and other investigations, drilling and mineral research work to assist the growth of the State's mineral industry.

The value of South Australian mineral products sold or used by producers in 1974-75 was \$126 million, a decrease of \$5 million from the 1973-74 figure. Both of these figures are lower than the \$134 million figure for 1972-73. (From 1973-74 the value of natural gas has been calculated 'at plant outlet' rather than 'at city-gate' as in previous years. If the 'city-gate value' had been used, the 1973-74 and 1974-75 values for natural gas, and for the total production, would have been about \$5 million higher in each case).

The value of iron ore sales decreased for the second year in succession from \$53.3 in 1973-74 and \$60.5 in 1972-73 to \$48.2 million in 1974-75. This fall was because of industrial disputes and lower demand in the steel industry and to BHP's use of increased quantities of iron ore from Mount Newman (WA) for their steel mills in New South Wales.

The estimated value of opal sales fell to \$21 million in 1974-75 from \$26 million in 1973-74. Most of this opal came from Coober Pedy.

Because of the lower copper prices prevailing, the value of copper products sold fell to \$7.6 million in 1974-75 from \$10.5 million in 1973-74. This was in spite of an increase in the copper content of the products to 10 037 tonnes in 1974-75 from 8 830 tonnes in 1973-74.

Natural gas sales increased to \$12.2 million in 1974-75 from \$8.0 million in 1973-74 (both values at 'city-gate').

At Kanmantoo, 55 kilometres east of Adelaide, copper sulphide concentrates of about 24 per cent copper grade are being produced by the flotation process from an open-cut mine. Production commenced in October 1971 after \$9.3 million had been spent in proving and opening the mine and establishing the treatment plant. The company had been treating over 800 000 tonnes of one per cent copper ore each year, but the mine is now likely to be placed on a care and maintenance basis by mid-1976 unless the price of copper improves.

At Burra, 160 kilometres north of Adelaide, Samin Ltd. commissioned the \$4.0 million second stage of the ammonia-leaching treatment plant at the old Burra Mine in September 1973. This involved the installation of a large ore roaster, a new ball mill and agitation leaching equipment. The known reserves are estimated to be about 3 million tonnes of over 1.5 per cent copper ore.

At Mount Gunson, 130 kilometres north-west of Port Augusta, Pacminex Pty Ltd has re-opened its treatment plant to handle 1500 tonnes of 2 per cent copper ore each day from a newly discovered ore body only 3 kilometres from the treatment plant. Testing has shown that there will be over 4 million tonnes of this ore to treat. A high grade copper sulphide concentrate will be produced. Direct employment is provided for about 110 people on the open-cut mine and plant, and a small township is located nearby.

The main work carried out recently on coal resources has been the drilling by Utah Development Company of the Lake Phillipson deposits and the investigation by ETSA on the reserves of coal remaining at Leigh Creek.

Utah Development has reported that the testing of the Lake Phillipson coal deposits (found originally in 1905) has indicated that the total recoverable quantity could exceed 2 000 million tonnes. These deposits of medium to low grade steam coals, which have a marginally higher calorific value than the Leigh Creek coal, are located about 90 kilometres south of Coober Pedy and will be near the proposed Tarcoola-Alice Springs railway.

The Australian Mineral Foundation Inc., established at Frewville 4 kilometres to the east of the centre of Adelaide, provides short-term specialist training at professional and sub-professional levels for the mining and petroleum exploration and production industries.

The Australian Mineral Development Laboratories (AMDEL), also at Frewville, continue to carry out valuable research, development and laboratory service work for the mineral industry of Australia and neighbouring countries.

The following table shows details of private mineral exploration, other than petroleum, in South Australia for 1972-73 and 1973-74.

Private Mineral Exploration (Other than Petroleum), South Australia(a)

Particulars	Unit	On Current Producing Leases		On Other Areas		Total Private Exploration	
		1972-73	1973-74	1972-73	1973-74	1972-73	1973-74
Depth drilled:			,				
Core	'000 m	n.a.	n.a.	n.a.	n.a.	34	21
Non-core	'000 m	n.a.	n.a.	n.a.	n.a.	309	187
Total depth drilled	'000 m	8.0	n.a.	335	n.a.	343	207
Expenditure: Drilling;							
Core	\$'000	n.a.	n.a.	n.a.	n.a.	n.a.	656
Non-core	\$'000	n.a.	n.a.	n.a.	n.a.	n.a.	778
Total drilling	\$'000	116	n.a.	1 632	n.a.	1 748	1 434
Other	\$'000	31	n.a.	3 484	n.a.	3 515	3 051
Total expenditure	\$'000	146	n.a.	5 116	n.a.	5 263	4 485

<sup>(</sup>a) Excludes exploration for water and all development work. From 1973-74, excludes details of exploration by business undertakings operated by State and local government authorities.

Details of private petroleum exploration and development for South Australia are shown in the following table for the years 1970 to 1973.

Private Petroleum Exploration and Development, South Australia

Particulars	Unit	1970	1971	1972	1973
Wells drilled (a)  Depth drilled	No.	23	20	17	6
	'000 m	41·0	52·5	44·7	21·1
Expenditure: Private sources Government subsidy (b)	\$'000	6 431	7 084	9 804	1 871
	\$'000	923	537	611	414
Total expenditure	\$'000	7 354	7 621	10 415	2 285

<sup>(</sup>a) Number of wells reaching total depth during year.

#### **FORESTRY**

There are an estimated 6 million hectares of land classified as wooded in South Australia, but much of this is too small or scattered to be of current economic value for wood production or is better retained in its present form for environment protection reasons. Some 780 000 hectares carries forest

<sup>(</sup>b) Payments under the Petroleum Search Subsidy Act 1959-1969.

or forest woodland, a decreasing part of which is still exploited for minor quantities of timber and fencing or firewood materials. Many of the forested or wooded areas are of considerable value for soil conservation, watershed protection, shelter, shade, conservation of indigenous plants and animals, and natural scenery.

Certain areas have been set aside as State forest reserves, the total area thus reserved at 30 June 1975 being 127 459 hectares. In addition the Woods and Forests Department is responsible for 2 176 hectares of reservoir lands, of which 1 118 are planted with pines.

In recent years the total area reserved has varied little mainly because of the increasing unavailability of land. The net increase over the last five years was 9 059 hectares. During the same period the area under plantation on Forest Reserves increased by 8 927 hectares.

A more detailed history of forestry development in South Australia was included on pages 432-4 of the South Australian Year Book 1970.

# Indigenous Forests

The natural forests of South Australia consist of eucalypt hardwoods restricted principally to the Mount Lofty Ranges, the lower Flinders Ranges, the southern portion of Eyre Peninsula, and the South East. A few species are of commercial value and these are used to a limited extent for the production of poles, posts, rails and sleepers.

Some areas of forest reserves not planted with conifers are maintained under native hardwoods but it is unlikely that further hardwood plantations will be established for timber purposes.

# **Plantations**

Seedlings raised in nurseries are planted out in the forest at densities of 1700-2200 trees to the hectare. A series of thinnings, starting when the trees are about 20 metres high, reduces density to about 150 trees to the hectare by about age forty. These thinnings are carried out on a commercial basis and make the major contribution to present timber and pulpwood output. The final felling age is aimed at forty to fifty years although for management purposes some earlier felling has been made in the past. Trees of the same age may vary in height; on some sites trees reach 20 metres after ten years of growth, but on other sites this height may not be reached until after twenty years of growth.

Exotic softwoods accounted for approximately 98 per cent of the planted forest area at 30 June 1975. As can be seen from the accompanying tables the majority of the planted forest is in the lower South East. The 625 mm rainfall line roughly divides the South East in two; the lower South East, with an annual rainfall in excess of 625 mm, is quite suitable for commercial forestry, but the upper South East is not.

The following table clearly illustrates the predominant importance of one species, *Pinus radiata*, in the composition of South Australian forests. Areas of other species are now minor, although over a hundred species have been tried in earlier years.

Forests, South Australia

Area Planted during 1974 and Net Area of Plantations at 31 March 1975

	Plante	d during	; 1974	Plantatio	Plantations at 31 1975		
Location	Softwoods		TTand	Softwoods		** '	
	Pinus Radiata	Other Pinus	Hard- woods	Pinus Radiata	Other Pinus	Hard- woods	
State forests:			Hec	tares			
Northern Region; Bundaleer	41·5 59·2	=	<u>-</u>	1 351·1 1 763·0	35·8 69·0 —	196·5 39·6 146·6	
Total Northern	100-7			3 114·1	104.8	382.7	
Central Region; Mount Crawford Kuitpo Blackwood Second Valley Other forests	290·1 63·7 — 120·4		-	5 756·8 2 136·9 7·4 1 491·6	417·9 389·8 — 193·3	39·7 114·0 — 11·8	
Total Central	474-2	0.4		9 392.7	1 001.0	165-5	
Riverland Region; Parilla Other forests	=	_	_		6·1	48.6	
Total Riverland	_	_	_		6.1	48.6	
South Eastern Region; Penola Comaun Mount Burr Noolook Mount Gambier Kongorong Tantanoola Caroline Myora Cave Range	97·1 47·7 41·2 303·7 173·9 175·6 176·9 224·3 221·4	3·2 		12 221·4 2 814·5 9 186·4 2 450·7 6 629·7 1 242·1 7 692·9 6 169·1 5 700·4 206·9	1 901·3 304·0 597·4 4·0 713·1 6·3 995·8 670·8 226·6 105·2	0·9 6·7 77·3 — 7·5 — 6·3 —	
Total South Eastern	1 461.8	3.2	-	54 314.1	5 524.5	98.7	
Western Region; Wanilla Waterworks reserves	_	1.4	1.9	48·6 992·3	23·2 126·0	345·4 1·5	
Total State forests	2 036.7	5.0	1.9	67 861.8	6 <b>7</b> 85·6	1 042-4	
	<u></u>						
Total private forests	4	96		17 0	)46	99	
Total forests	2 5	38		91 6	593	1 141	

Forests, South Australia
Net Area of Plantations at 31 March

Location	1971	1972	1973	1974	1975
State forests:			Hectares		
Northern Region;					
Bundaleer	1 386	1 470	1 507	1 541	1 583
Wirrabara	1 598	1 596	1 703	1 845	1 872
Other forests	146	146	146	146	147
Total Northern	3 130	3 212	3 356	3 532	3 602
Central Region;					
Mount Crawford	4 642	4 937	5 131	5 451	6 214
Kuitpo	2 604	2 617	2 614	2 628	2 641
Blackwood Second Valley	1 1 388	1 1 462	7 1492	7 1 578	1 697
Other forests		1 402 —			
Total Central	8 635	9 017	9 244	9 664	10 559
Riverland Region;					
Parilla	55	55	55	55	55
Other forests	_	_	-		
Total Riverland	55	55	55	55	55
South Eastern Region;					
Penola	13 891	14 037	13 989	14 073	14 124
Comaun	2 986	3 006	3 027	3 090	3 125
Mount Burr	10 057 1 296	10 050 1 581	10 082 1 823	9 865 2 151	9 861 2 455
Noolook	8 117	7 715	7 807	7 402	7 350
Kongorong	> <	648	814	1 164	1 248
Tantanoola	7 825	8 180	8 374	8 536	8 695
Caroline	5 852	6 076	6 434	6 681	6 840
Myora	5 537 314	5 725 314	5 725 314	5 753 312	5 927 312
Total South Eastern	55 875	57 332	58 389	59 027	59 937
Wastern Dagiers		****		<del></del>	
Western Region; Wanilla	402	408	412	413	417
Waterworks reserves	1 024	1 085	1 116	1 120	1 120
Total State forests	69 121	71 109	72 572	73 811	75 690
Total private forests	15 964	16 445	16 691	16 876	17 145
Total forests	85 085	87 554	89 263	90 687	92 835

#### FOREST ADMINISTRATION

#### State Forests

State forests are administered by the Woods and Forests Department headed by the Conservator of Forests. The Forest Reserves are organised into Districts and are under the charge of professionally trained foresters. The Department is also the major timber producer in South Australia, and operates three sawmills and two wood preservation plants through its Commercial Division.

In earlier years when large areas of plantations were being established expenditure by the Department exceeded revenue, but since 1942-43 the revenue has exceeded expenditure including depreciation and interest on loans. By 1954-55 accumulated surpluses had matched expenditure on establishment and maintenance of plantations, and annual surpluses of the Department are now paid to Consolidated Revenue.

Funds employed by the Woods and Forests Department, including its milling operations, amounted to \$38 538 151 at 30 June 1975 of which \$23 762 000 was timber and land at net cost. The present value of the State pine forests is approximately \$110 million.

#### **Private Forests**

Private forests accounted for approximately 18 per cent of the planted area at 31 March 1975. Three private companies operating pine plantations in the South East control the bulk of private forest land, with the balance representing a large number of holdings of a few hectares on farming properties throughout the State.

#### PRODUCTION

The following table gives the quantity of forest logs used during the years from 1970-71 to 1974-75.

Year	Softwoods	Hardwoods	
	Cubic	Metres	
1970-71	. 874 569	10 424	
1971-72	. 900 800	8 791	
1972-73	. 918 744	5 909	
1973-74	. 902 929	5 197	

7 017

1974-75 . . . . . . 904 289

Forest Log Usage, South Australia

Log production is met from final fellings and thinning operations, and planned forest management ensures that the amount of timber cut each year does not exceed new growth. As planting during the ten years before 1925 was relatively small, final fellings in recent years have been limited, and thinning operations currently provide nearly 90 per cent of log production. With the increasing area of forest reaching the stage of regular and repeated thinning at intervals of about seven years, log production is rising steadily towards the full annual yield which can be cut indefinitely.

Other forest products include firewood, yacca gum, honey and wattle bark.

#### **EMPLOYMENT**

The number of persons directly employed by the Woods and Forests Department in forestry activity in recent years is given below. The Department also employs 744 persons in milling activities.

State Forestry Employees, South Australia
At 30 June

Classification	1971	1972	1973	1974	1975
Professional Staff:					
Foresters	44	49	53	51	53
Other	41	36	31	29	26
Non-professional field staff	30	27	31	35	. 38
Clerical staff	115	119	122	130	122
Labour (silvicultural forest works, etc.)	285	246	275	281	314
	515	477	512	526	553

The extraction of timber from State forests is carried out by contractors.

#### RESEARCH AND ADVISORY SERVICES

The virtual dependence of the South Australian forestry industry on a single species necessitates continued research into the maintenance and improvement of *Pinus radiata* resources, as well as into forestry in general.

The Woods and Forests Department maintains its own research facilities and in addition combines with the Australian Forest Research Institute in operating a regional branch of the Institute at Mount Gambier. Certain aspects of forestry research are also undertaken by the Soils Division of the Commonwealth Scientific and Industrial Research Organization, the Waite Agricultural Research Institute, the University of Adelaide and the Department of Forestry of the Australian National University.

Research activities aimed at an expansion of forestry production include the development of fertiliser use, both to stimulate growth and to bring into production land previously considered unsuitable, and the improvement of planting stock through selective breeding. Silvicultural research is concerned with the maintenance of soil fertility and with combating various diseases and pests. Permanent sample plots are maintained in departmental forests for research into various aspects of forest yield and management.

The Woods and Forests Department provides an advisory service in arboriculture and distributes, through its nurseries at Belair and Berri, a wide variety of trees suitable for planting in various climatic and soil conditions.

# FOREST PROTECTION

The hot dry summer conditions normal to the State require forest management to take considerable precautions and to maintain constant vigilance against forest fire. The clearing of undergrowth, the maintenance of fire-breaks, the manning of observation towers and the constant readiness of fire fighting units are all an integral part of forestry practice.

Other protective measures include spraying to prevent disorders, measures to control insect pests in the forest, and the eradication of the various weeds and pests which threaten young plants.

Since the discovery of the Sirex wood wasp in Victorian forests in 1961 constant watch has been maintained for any sign of this pest in South Australian pine forests, and the State has contributed to development of biological control measures.

#### **FISHERIES**

The entire coastline of South Australia, except for the unpopulated area west of Fowlers Bay, is fished commercially. In the sheltered waters of the gulfs, Kangaroo Island, the Coorong and the West Coast bays, there are prawn, net and handline fisheries; in the open off-shore waters tuna, lobster and shark are sought and on exposed coasts abalone are taken. Inland in the River Murray a small quantity of fresh water fish is caught each year.

#### ADMINISTRATION

Exploitation of the State's fish resources is controlled by three Acts, the South Australian Fisheries Act, 1971-1975, the Australian Fisheries Act 1952-1973 and the Continental Shelf (Living Natural Resources) Act 1968.

Under the State Act, which is administered by the Department of Agriculture and Fisheries, provision is made for the licensing of fishermen, the registration of boats and gear. Control of fishing activity is maintained by licence limitations, the establishment of size limits, closed areas and closed seasons, the regulation of amount and type of gear, the prohibition of the use of explosive or noxious substances in any waters and the establishment of aquatic resources.

The South Australian Fisheries Act, 1971-1975 provides for two classes of fishing licences. A person is granted a class A fishing licence if he satisfies the Director that he intends to carry on the business of fishing for profit as his principal business while a class B fishing licence is granted if the Director is satisfied that he intends to carry on the business of fishing for profit regularly as a seasonal or part-time business. In addition in both cases the licensee has to satisfy the Director that he has the equipment, experience and resources sufficient to enable him to carry on the business of fishing efficiently and profitably. An applicant who fulfils the above requirements may still be refused a licence if the refusal is necessary for the purpose of giving effect to any administrative policy approved by the Minister for the conservation of any species of fish or the proper management of any fishery.

#### FISHING BOATS

Vessels exceeding 20 metres are engaged primarily in tuna fishing and prawn trawling while the majority of vessels in the 8 metres to 20 metres range are used for rock lobster fishing. Abalone divers generally operate from small aluminium or fibreglass boats between 5 metres and 8 metres in length. The remainder are engaged mainly in handline and net fisheries. Boats and equipment were valued at \$20 326 000 in 1973-74. Details of the number of boats engaged in commercial fishing activities are shown in the following table.

Fishing: Boats Engaged, South Australia

Particulars	1969-70	1970-71	1971-72	1972-73	1973-74
Boats engaged:					
Under 6 metres	1 171	1 488	n.a.	1 596	1 771
6 metres and under 9	345	388	n.a.	376	410
9 metres and under 12	138	153	n.a.	175	181
12 metres and under 15	82	81	n.a.	104	114
15 metres and under 18	29	31	n.a.	34	42
18 metres and under 21	12	10	n.a.	17	21
21 metres and over	7	11	n.a.	12	19
Total	1 784	2 162	1 652	2 314	2 558

# **PRODUCTION**

# Fish

The main commercial fish species, together with their production in recent years, are listed in the following table.

Fish: Production by Species, South Australia
Estimated Live Weight

Species	1970-71	1971-2	1972-73	1973-74	1974-75
Marine:			'000 kg		
Australian salmon	1 039	1 881	799	1 897	873
Bream (black)	4	15	25	14	23
Garfish	259	459	552	539	487
Mullet	61	229	353	408	252
Mulloway	40	40	56	55	107
Ruff	80	277	241	209	211
Shark	2 109	1 480	618	1 161	459
Short finned pike	91	115	134	160	136
Snapper	356	528	541	445	284
Tuna	2 459	4 348	6 696	7 403	4 842
Whiting	834	714	959	823	977
Other marine species	760	182	130	129	155
Total	8 092	10 268	11 104	13 243	8 806
Freshwater:					
Golden perch (callop)	90	22	24	80	190
Murray cod	20	19	12	9	4
Bony bream	301	362	339	315	58
Tench	129	156	248	224	42
Catfish	24	23	15	14	7
Other freshwater species	59	47	47	103	201
Total	621	631	686	745	502
Total fish production	8 713	10 898	11 790	13 988	9 308

Tuna, salmon, shark, whiting, snapper and garfish are the most important marine species.

Tuna are taken in the waters west and south of Eyre Peninsula and Kangaroo Island. Occasional catches are taken beyond the continental shelf. Although purse-seining has been attempted, the most successful technique to date is pole fishing with live bait. The use of spotting aircraft has increased the efficiency of fishing operations. Most tuna are landed at Port Lincoln although occasional landings have been made at Streaky Bay.

Whiting are taken commercially in Spencer and St Vincent Gulfs, Investigator Strait and the West Coast bays. In many areas hand lining continues to provide profitable catches as this fish attracts a high price. In other areas of the gulfs and the West Coast large quantities of whiting and garfish are netted.

Shark fishing extends from the Victorian border in the east to Fowlers Bay in the far west. The main landing ports are the South East lobster ports, Port Adelaide, Port Lincoln and Streaky Bay. Shark are taken by long line and, more recently, by mesh netting. A decline in shark catches occurred after 1972 because high levels of mercury in their tissue precluded their sale and fishermen have been encouraged to fish for scale fish and leatherjackets.

Australian salmon provides useful off-season fishing for a number of tuna fishermen with the best catches being taken in Spencer Gulf and around Kangaroo Island. Most of these fish are landed at Port Lincoln for canning. In the South East large quantities of salmon trout are netted for crayfish bait. Of other species mulloway and snapper are highly regarded as table fish. Mulloway are netted in the River Murray Mouth area and snapper are taken by hand and long line in most areas of the State, and by netting in shallower parts of the gulfs and West Coast bays.

Approximately 150 part-time commercial fishermen using drum nets, gill nets and set lines are engaged in fishing on the River Murray and Lakes area. This is the only commercial source of fresh water fish in the State because of the general lack of permanent streams and lakes. The river has been sectioned into 'reaches' and 'reserves' and each commercial river fisherman is issued with a permit to fish a separate reach.

Production in 1974-75 was valued at \$4 860 000, the gross values of the major species being:

	\$
Tuna	
Whiting	. 1876 000
Snapper	
Garfish	. 341 000
Australian salmon	. 179 000
Shark	289 000
All other	492 000
	4 860 000

#### Crustaceans

Southern rock lobster are taken by pots from the shore to the edge of the continental shelf. The south-east coast between Kingston and the Victorian

border is the main fishing area. Good catches are also taken from grounds around Kangaroo Island, near the Althorpe Islands and Port Lincoln, and along the west coast. Rock lobster is South Australia's most important single fishery. However, with 80 per cent of the catch exported annually, mainly to the United States of America, its profitability is dependent on overseas markets.

Rock Lobster Production, South Australia

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
Estimated gross weight					
('000 kg)	2 232	2 252	2 958	2 637	1 862
Value (\$'000)	4478	5 362	6 325	6 223	4 672

The prawn fishing industry operates in Spencer and St Vincent Gulfs and in the waters of the Great Australian Bight. In the 1974-75 season approximately 2 530 tonnes of prawns valued at \$3 795 000 were landed.

#### Molluses

Abalone are found in greatest numbers at depths of 12 to 30 metres on the extensive limestone bottom off the shores of western Eyre Peninsula. Smaller numbers are taken in Spencer Gulf, around Kangaroo Island and on the southeast coast. As yet there is no domestic market for this mollusc. Overseas exports of abalone from South Australia during 1974-75 were valued at \$527 089.

All abalone divers must hold a commercial fisherman's licence as well as a special abalone permit issued by the Department of Agriculture and Fisheries.

Abalone Production, South Aus	ıstralia	
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Particulars 1	1970-71	1971-72	1972-73	1973-74	1974-75
Gross (in shell) weight ('000 kg)	1 100	1 141	900	757	608
	653	796	655	752	564

Squid and cuttlefish are taken in the general net fisheries and mainly sold for bait, although the domestic squid market for human consumption is increasing.

At present several private consortiums are interested in farming the Pacific oyster. This oyster was introduced into this State in September 1969 from Tasmania. Farms have been established at Coffin Bay and near Edithburgh where young oysters (spat) are imported annually and grown to market size. Other farms have been proposed for Port Lincoln and Eastern Cove on Kangaroo Island. The Fisheries Branch is continuing to encourage development in the industry by extending its research activities to oysters with the appointment of a biologist to work full-time in this field.

#### MARKETING AND PROCESSING

Marketing and processing arrangements vary according to the species. Tuna are landed at Port Lincoln and then canned for local consumption or frozen for export. Large catches of salmon are generally landed and canned at Port Lincoln, a deep sea port. Southern rock lobster are tailed and frozen for export

at most of the main ports, but some are cooked for local consumption. Some prawns are cooked and sold locally but most are frozen and exported. Abalone is either canned or frozen for export. Shark are gutted and headed at sea and are frozen at the port of landing for interstate markets. Other fish are generally iced for dispatch to the Adelaide market or are scaled, filleted and frozen for general distribution.

All of the main landing ports have chilling or freezing facilities and many have processing plants. Several of these are operated by individual buyers or co-operatives but most are depots of the South Australian Fishermen's Co-operative Limited (SAFCOL). In addition to collecting, processing and distributing fish from the outports, SAFCOL also operates the Adelaide fish market. This is an auction market which handles fish for both members and non-members.

#### RESEARCH

The realisation that research is essential for effective fisheries management has promoted several research programs. Scallop, rock lobster, shark and abalone resources are being investigated by joint Australian Government and States research groups consisting of the Division of Fisheries and Oceanography of the Commonwealth Scientific and Industrial Research Organization (CSIRO), the Fisheries Division of the Australian Department of Agriculture, and the Fisheries branches of New South Wales, Victoria, Tasmania and South Australia. In addition, the State Fisheries Branch is conducting rock lobster, prawn, cockle and abalone research programs and began measuring commercial fish species in 1975 to determine frequency and distribution of various sizes throughout the commercial fish catch. A co-operative research program on the Australian salmon by the CSIRO Fisheries and Oceanography Division and the Western Australian Department of Fisheries and Wildlife commenced also in 1975. The State Fisheries Branch is giving logistic support.

A senior freshwater biologist of the Fisheries Branch is studying the ecological effects on freshwater fish species. All programs are directed towards providing a scientific basis for the management of the fisheries concerned.

The decision in 1966 of the Australian Government and the States to establish a joint Fisheries Research and Development Fund gave impetus to already expanding research programs. The Fishing Industry Research Trust Account was established under the Fishing Industry Research Act 1969 which authorises an appropriation from Australian Government revenue equal to amounts collected from the fishing industry by the State Fisheries Authorities and expended by them for the development and management of State fisheries.

#### Conservation

The importance of protecting the marine and freshwater environment against pollution and other man-caused degradation is recognised in Section 56 of the Fisheries Act, 1971-1975 which enables the Governor to make regulations for regulating or prohibiting the discharge, placing or flow into waters of any matter

(whether solid, liquid or gaseous) declared by the regulations to be poisonous or injurious to fish or their spawn thereof, and generally for protecting fish and the spawn thereof against destruction or injury by the discharge, placing or flow of any such matter into waters'.

The State Department of Agriculture and Fisheries has pioneered, in Australia, the concept of marine national parks and has created a number of aquatic reserves to protect seal colonies, mangrove communities and areas of scientific and educational interest. Mangrove communities and allied samphire flats have received particular attention because of their recently recognised contribution to the productivity of the near-shore marine environment. All mangroves in South Australia are fully protected.

# 9.3 MANUFACTURING

#### DEVELOPMENT

Early factory production was orientated to local needs: thus brick kilns, flour mills, tanneries, distilleries and a candle and soap works were among factories recorded in the 1840s. Also in operation were the smaller establishments of saddlers and coachbuilders, while various food and clothing industries were being established. Heavy industry can probably be traced to the production of agricultural machinery, beginning with the stripper of 1843 and including the stump-jump plough of 1876.

The discovery of copper in 1842 provided an impetus to certain industrial activities but the finding of gold in Victoria in 1851 encouraged many skilled persons to leave South Australia and the Colony's infant industries were not fully to recover for some two decades.

A highlight in the industrial progress of the State was the establishment at Port Pirie in 1889 of smelters for the processing of silver-lead ore from Broken Hill. This was primarily responsible for building up Port Pirie's population from about 900 at the 1881 Census to some 8 000 twenty years later, making the town at that time the largest country centre in South Australia.

Despite some industrial growth, South Australia in the 1930s was still basically a primary producing State, but since then a rapid growth in the relative contribution of secondary industry to total production has taken place. Development in the 1930s coincided with Government action which reduced company taxation and wharfage charges, and provided for a program of low-cost housing. The needs of war provided a further stimulus to the industrialisation process during the 1940s but it is since the 1939-45 War that the most impressive development has taken place.

Extensive development has occurred particularly in the consumer durable industries (e.g. motor vehicles, electrical and household appliances) and these industries now employ a significant proportion of the State's labour force. Major improvements also have been made in the State's energy sources with the development of the Torrens Island Power Station and the Port Stanvac Oil Refinery, and the introduction of natural gas as a fuel.

#### MANUFACTURING INDUSTRY STATISTICS

For the year ended June 1969, the Censuses of Manufacturing and Electricity and Gas Establishments were conducted for the first time on an integrated basis with Censuses of Mining, Retail Trade and Selected Services, and Wholesale Trade. The electricity and gas industries, which were previously included in the Annual Factory Census, were the subject of separate censuses in 1968-69. As well as this change in the method of obtaining information on economic activities, different criteria have been used to define factories and this has resulted in a significant fall in the number of establishments. In particular, service establishments such as dry cleaners and motor repair workshops are no longer classified as factories. In addition to the changes in industry classification information is now collected for all activities (including such things as installation work or wholesaling) undertaken by establishments which are defined as factories.

Thus, manufacturing industry statistics collected for the 1968-69 Census and subsequent censuses are not comparable with figures obtained from previous factory censuses. A more detailed explanation of these changes was included on pages 440-4 of the South Australian Year Book 1972.

#### **LEGISLATION**

Industrial legislation is dealt with in Part 7, Labour. Other legislation is concerned with the location of factory premises and with the processes carried out therein.

Under the Local Government Act, 1934-1975 local government authorities may make by-laws restricting the erection of factory premises to certain sections of the area under their jurisdiction. The Manufacturing Industries Protection Act, 1937 provides for the proclamation of certain areas wherein proprietors and occupiers of factories are protected against civil action for noise and vibration problems. This Act, which takes precedence over zoning by-laws, currently applies to four relatively small zones. Regulations made under the Noxious Trade Act, 1943-1965 have defined certain processes as noxious trades for which a licence must be obtained. In addition an area between Wingfield and Dry Creek in the outer northern suburbs has been declared a noxious trade area with persons operating therein being protected from civil action.

Similarly the licensing of noisy trades may be required under a section of the Local Government Act. Protection against health hazards is provided under the Health Act, 1935-1975.

#### CLASSIFICATION OF MANUFACTURING ESTABLISHMENTS

The Australian Standard Industrial Classification (ASIC) described in the publication The Australian Standard Industrial Classification (Preliminary Edition), 1969 Volume 1, defines the industries in the economy for statistical purposes, thus permitting the scope of the different economic censuses to be specified without gaps or overlapping between them.

The classes relevant to the Manufacturing sector of the economy were listed on pages 492-6 of the South Australian Year Book 1975.

#### STRUCTURE AND LOCATION OF SECONDARY INDUSTRY

Industrialisation since the 1939-45 War to a considerable extent has evolved around three major industrial groups. The motor vehicle, the electrical goods and the household appliance industries, together with their peripheral suppliers of components and services, have accounted for much of the post-war expansion. These industries are located in, or near Adelaide. In fact the tendency for manufacturing industries, particularly those supplying consumer goods, to congregate near their market has resulted in a heavy concentration of South Australian secondary industries in or near Adelaide.

In the next table some details are given for the Adelaide Statistical Division. The concentration of manufacturing industry in this Division can be seen by comparing the figures with those appearing in the subsequent two tables which summarise manufacturing operations for the whole State.

# Manufacturing Establishments: Summary of Operations by Industry Subdivision Adelaide Statistical Division, 1972-73

Industry Subdivision	Number of Establish- ments	Persons Employed	Wages and Salaries	Turnover	Value Added
	Nun	ıber		\$'000	
Food, beverages and tobacco	221	11 809	48 101	246 186	93 348
Textiles	44	2 164	8 421	52 014	15 977
Clothing and footwear	103	4 295	12 151	41 714	22 085
Wood, wood products and furniture	399	6 039	20 897	91 658	36 358
Paper and paper products, printing	197	5 713	24 753	83 695	45 927
Chemical, petroleum and coal products	70	2 714	13 953	73 955	33 735
Non-metallic mineral products	115	3 715	18 158	79 263	40 582
Basic metal products	53	4 000	20 541	9 <b>2</b> 973	36 079
Fabricated metal products	382	10 553	43 264	165 232	71 668
Fransport equipment	148	23 986	115 088	376 055	139 744
Other machinery and equipment	349	19 220	80 774	270 735	129 310
Miscellaneous manufacturing	239	5 658	22 515	77 110	39 525
Total manufacturing	2 320	99 866	428 616	1 650 588	704 338

# Manufacturing Establishments: Summary of Manufacturing Operations by Statistical Division, 1972-73

Statistical Division	Number of Establish- ments	Persons Employed	Wages and Salaries	Turnover	Value Added
	Nun	nber		\$'000	
Adelaide Central Kangaroo Island Mount Lofty Ranges Murray South East Eyre Northern Far North	38 4 161 121 119	99 866 353 17 3 649 2 847 4 034 672 9 933 25	428 616 1 201 28 12 588 10 711 17 819 2 305 49 821 85	1 650 588 7 603 161 87 606 84 355 95 774 12 682 232 979 271	704 338 2 847 80 31 314 29 092 41 176 4 754 82 934 155
Total State	2 914	121 396	523 173	2 172 019	896 691

Generally, industrial plants outside the Adelaide Statistical Division are orientated to sources of supply, exceptions being the production of agricultural machinery at Mannum and the presence of woollen mills at Lobethal and Mount Gambier. Wallaroo and Port Lincoln, being central to their markets, are the sites of chemical fertiliser production.

The two most important undertakings beyond the vicinity of Adelaide are the iron and steel complex at Whyalla and the lead smelters at Port Pirie. These undertakings together with the power station at Port Augusta are sited for important mineral sources. Other factories are located near sources of primary products—these include the sawmills and paper pulp industries of the South East, the fruit processing plants of the Upper Murray, the wineries and distilleries of the Barossa Valley and the Murray, and various dairy produce factories and fish processing plants.

In the following table details of factories for 1972-73 are classified according to industry class. The importance of the metal processing industries, e.g. transport equipment, fabricated metal products, machinery and equipment industries, to the State can be seen readily from this table.

Manufacturing Establishments: Summary of Operations by Industry Subdivision South Australia, 1972-73

Industry Subdivision	Number of Establish- ments	Persons Employed	Wages and Salaries	Turnover	Value Added
	N	umber		\$'000	
Food, beverages and tobacco	446	18 010	70 719	424 374	152 832
Textiles	48	2 562	9 620	56 291	17 741
Clothing and footwear	106	4 423	12 480	42 483	22 548
Wood, wood products and furniture	496	8 337	29 800	133 673	53 008
Paper and paper products, printing	244	7 154	32 109	123 542	66 223
Chemical, petroleum and coal products	78	2 980	15 243	84 540	37 737
Non-metallic mineral products	166	4 116	19 818	88 789	45 241
Basic metal products	59	9 889	51 766	264 047	93 519
Fabricated metal products	441	11 203	45 891	178 097	77 812
Transport equipment	177	26 726	128 189	413 338	155 072
Other machinery and equipment	393	20 090	84 168	281 453	133 986
Miscellaneous manufacturing	260	5 906	23 369	81 390	40 972
Total manufacturing	2 914	121 396	523 173	2 172 019	896 691

Transport equipment accounted for 17 per cent of value added while fabricated metal products, machinery and equipment etc., accounted for 24 per cent. Employment in these industries was 22 per cent and 26 per cent respectively of the total factory employment. Also of considerable importance to South Australia are the food and drink industries, particularly milk processing and winemaking.

The importance of South Australia relative to manufacturing industry in Australia as a whole can be gauged from the following comparison.

Manufacturing Establishments: Summary of Operations, South Australia and Australia, 1972-73

Item 1	Unit	South Australia	Australia	South Australia as a Percentage of Australia
Number of establishments at 30 June nu Average employment:	mber	2 914	36 433	Per cent 8·0
Male nu	ımber	95 581	952 219	10.0
Femalenu		25 815	345 574	7·5 9·0 8·2 9·5 8·3
	000	523 173	5 811 792	9.0
	000	2 172 019	26 375 613	8.2
	000	409 640	4 306 990	9.5
Value added	3'000	896 691	10 743 071	8.3
Fixed capital expenditure	000	96 402	1 242 595	7⋅8

Although there were 2 994 establishments operating at 30 June 1969 only 195 or 6.5 per cent had an employment in excess of 100 persons while 1 799 establishments, or 60 per cent of the total, employed less than 10 persons. The thirty largest factories employed 44 610 persons or 39 per cent of the total.

In the following table factories are grouped according to the number of persons employed.

Manufacturing Establishments: Selected Variables by Size of Establishment South Australia, 30 June 1969

Size of Establishment (average employment)		Persons Employed (a)	Turnover	Value Added
			\$'	000
Less than 5	1 198	2 957	32 028	12 836
5 but less than 10	601	4 283	46 520	19 467
10 but less than 20	450	6 540	79 983	31 309
20 but less than 50	386	12 378	162 949	62 299
50 but less than 100	164	11 348	168 341	64 639
100 but less than 200	116	16 637	252 278	97 700
200 but less than 500	49	15 719	224 688	96 199
500 and over	30	44 610	607 935	256 445

<sup>(</sup>a) Excludes persons employed at administrative offices and other separately located ancillary units, e.g. storage and transport depots.

Details of persons employed in manufacturing establishments for 1971-72 and 1972-73 are given in the following tables. In these years, females constituted 20·1 and 20·9 per cent respectively of the total employment, but industries traditionally associated with female employment had a much higher component; textiles, clothing and footwear industries, in particular, employ a large number of females.

A relatively greater number of working proprietors are found in classes which embrace the smaller manufacturing unit. For example, of the 1918 working proprietors shown for 1972-73, more than half operated engineering workshops, bakeries, joineries and cabinet-making businesses; others were associated with printing, upholstery, jewellery manufacturing and winemaking.

# Manufacturing Establishments: Average Number of Persons Employed South Australia

Industry Subdivision -	1971-72			1972-73		
	Males	Females	Total	Males	Females	Total
Food, beverages and tobacco  Textiles  Clothing and footwear  Wood, wood products and furniture  Paper and paper products, printing  Chemical, petroleum and coal products  Non-metallic mineral products  Basic metal products  Transport equipment  Other machinery and equipment  Miscellaneous manufacturing	1 470 1 033 6 947 5 224 2 488 3 762 9 326 9 530	5 149 1 194 3 242 1 124 1 832 541 383 674 2 394 1 715 5 296 1 838	17 810 2 664 4 275 8 071 7 056 3 029 4 145 10 000 11 924 26 822 20 154 5 626	12 688 1 425 1 099 7 159 5 294 2 458 3 694 9 197 9 074 24 706 14 762 4 025	5 322 1 137 3 324 1 178 1 860 522 422 692 2 129 2 020 5 328 1 881	18 010 2 562 4 423 8 337 7 154 2 980 4 116 9 889 11 203 26 726 20 090 5 906
Total manufacturing	96 194	25 382	121 576	95 581	25 815	121 396

# Manufacturing Establishments: Average Number of Persons Employed by Type of Employment, South Australia

To decide Code district		1971-72		1972-73			
Industry Subdivision	Working Proprietors	Employees	Total	Working Proprietors	Employees	Total	
Food, beverages and tobacco Textiles Clothing and footwear Wood, wood products and furniture Paper and paper products, printing Chemical, petroleum and coal products. Non-metallic mineral products	26 69 484 169 1 22 73	17 533 2 638 4 206 7 587 6 887 3 007 4 072	17 810 2 664 4 275 8 071 7 056 3 029 4 145	269 31 64 456 157 25 67	17 741 2 531 4 359 7 881 6 997 2 955 4 049	18 010 2 562 4 423 8 337 7 154 2 980 4 116	
Basic metal products Fabricated metal products Transport equipment Other machinery and equipment Miscellaneous manufacturing	298 99	9 976 11 626 26 723 19 962 5 386	10 000 11 924 26 822 20 154 5 626	26 283 111 194 235	9 863 10 920 26 615 19 896 5 671	9 889 11 203 26 726 20 090 5 906	
Total manufacturing	1 973	119 603	121 576	1 918	119 478	121 396	

#### WAGES, SALARIES AND OTHER COSTS

The following table shows costs associated with the usage of labour and materials by manufacturers. A comparison of salaries and wages paid against other costs reveals those industries that are relatively labour intensive; for example, wages and salaries constitute 40 per cent of the total cost for firms making clothing or footwear while in the food, beverages and tobacco group, only 23 per cent of the total costs are those associated with labour.

# Manufacturing Establishments: Wages and Salaries and Other Selected Costs South Australia. 1972-73

	Salar	Salaries and Wages Paid to					
Industry Subdivision	Administrative, Office, Sales and Distribution Employees	Production and All Other Workers	All Employees	- Total Usage of Materials, Elec- tricity and Fuels, Containers, Etc.			
		S'C	100				
Food, beverages and tobacco Textiles Clothing and footwear Wood, wood products and furniture Paper and paper products, printing. Chemical, petroleum and coal products Non-metallic mineral products Basic metal products Fabricated metal products Transport equipment Other machinery and equipment Miscellaneous manufacturing	1 944 5 943 11 420 6 085 5 728 16 048 10 970 32 460 22 290	47 628 7 511 10 537 23 857 20 689 9 159 14 090 35 719 34 922 95 730 61 880 17 626	70 719 9 620 12 480 29 800 32 109 15 243 19 818 51 766 45 891 128 189 84 168 23 369	240 440 37 959 18 438 64 118 44 224 32 953 32 965 144 771 80 189 240 950 126 611 35 362			
Total manufacturing	143 829	379 345	523 173	1 098 980			

# SELECTED FACTORY PRODUCTS

The factory products listed in this section are not necessarily the principal items produced in this State. Where publication of details of an individual product would enable the output of a particular manufacturer to be determined, these figures are treated as confidential and are not separately available for publication. As a considerable number of products are produced in this State by industries containing one or two dominant firms, the list of publishable items is considerably restricted and the absence of a product from the list does not necessarily imply its non-production.

Selected Articles Produced: South Australia, 1971-72 and 1972-73(a)

Tram	TT-11 C	1971-72			1972-73		
Item	Units of Quantity	Production	Sales and	Transfers	Production	Sales and	Transfers
		Quantity	Quantity	Value	Quantity	Quantity	Value
F-1-4		· ··· · · · · · · · · · · · · · · · ·		\$'000			\$'000
Aerated and carbonated				•			
waters, bottled and	'000 I	85 386	75 430	15 111	98 385	95 870	21 120
canned						5 333	9 452
Bacon and ham	'000 kg	5 096	4 987	8 681	5 233	3 333	9 432
Barrels, kegs, vats, drums				0.050			2 167
and tanks	• •	• •		3 858	5 5 4 F	• •	3 167
Batteries, wet cell (auto-	_						
motive), 12 volt, rebuilt	number	9 014	9 009	107	n.a.	n.a.	n.a.
Blinds and awnings:							
Metal venetian				421			508
Outdoor, canvas				684			804
Outdoor, metal				835			924
Brandy	'000 lal	3 840	3 603	4 923	3 038	3 847	5 371
Bricks, clay	,000	137 532	134 819	7 466	145 497	146 929	8 306
Butter, from cream (excl.							
that from whey cream)	'000 kg	6 196	5 502	n.a.	4 969	4 303	n.a.
Butter, total value	OUU ME	0 100	5 502	4 527		. 505	5 525

**PRODUCTION** 

# Selected Articles Produced: South Australia, 1971-72 and 1972-73(a) (continued)

Item	Units of		1971-72			1972-73	
item			Sales and	Transfers	Production	Sales and	Transfer
		Quantity	Quantity Value		Quantity	Quantity	Value
				\$'000			\$'000
Cakes, pastry, pies and puddings (not canned) Cheese, cheddar, green wt. Chickens.	'000 kg	16 805 10 837	17 409 10 921	13 443 <i>n.a.</i> 9 917	16 080 12 180	15 525 12 603	14 982 n.a. 11 352
Fertilisers, manures (of blood, bone and/or offal)	tonnes	4 323	4 320	256	n.a.	n.a.	n.a.
Floorboards, Australian	ms	40 758	40 517	3 181	46 244	47 445	3 930
timbers	tonnes	98 109	108 332	11 377	89 763	96 669	10 512
Fluorescent light fittings		,,		2 620			3 199
Fruit, crystallised and	1000 1	(22	004	021	1.074	1054	1 201
glace	'000 kg '000 <i>l</i>	623 3 611	891 2 913	931 924	1 074 5 278	1 054 5 125	1 201 1 528
Furniture:	000 1	3 011	2 713	724	3276	J 125	1 320
				3 252			4 015
	••	• •	• •	16 386	••	••	19 300
Wooden	doz. pairs	82 474	96 746	667	71 128	83 232	788
łot water systems, electric	number	9 379	n.a.	n.a.	n.a.	n.a.	n.a.
ce	tonnes '000 I	20 008 16 669	18 354	293	19 772 17 173	19 770 n.a.	336
ce cream	000 2	10 009	n.a.	n.a.	17 173	n.a.	n.a.
Machinery:							
Conveyors and appliances		••	••	4 328		••	4 660
machinery				2 514			2 893
Mining and drilling	••	• •	••	9 001	••	••	2 637
Pumping		co 210	61 991	1 966	65 i21	65 011	2 509
Mattresses, innerspring Newspapers and periodicals printed and	number	62 310	61 991	1 034	63 121	65 011	1 396
published				8 308			8 080
Paints:							
Architectural and decorative;							
Primers and under- coats	1 000	712	704	653	748	697	699
Finishing coats Industrial;	'000 <i>i</i>	1 706	1 660	1 862	1 803	1 747	2 074
Primers and under-	1 000		1 495	1 212	1 287	1 263	1 071
coats	'000 I	n.a. 3 469	1 495 3 489	3 276	3 762	3 718	3 582
Plaster, fibrous	m²	216 052	225 859	454	142 782	167 433	369
Ready mixed concrete	m <sup>8</sup>	901 655	924 959	15 754	970 642	972 421	19 187
Smallgoods	••	••	••	11 713	••	••	12 622
steam, gas and water fittings				2 861			2 874
teel, fabricated con-	••						
structional	tonnes	76 950	79 082	22 624	121 984	87 234	25 836
Tallow, inedible	'000 kg	27 100	26 996	3 436 184	21 463	21 325	3 385 272
Tents, flies and marquees	••		••	n.a.	•••	••	825
Window frames,	••	• •			••		
aluminium	••	••	••	4 967	••	••	5 182
Wine:							
Fortified	'000 <i>t</i>	35 640 63 473	37 756 51 900	16 256 24 202	34 559 79 679	37 639 69 595	15 870 32 811

<sup>(</sup>a) Includes details for Northern Territory.

26 217

78 127

#### INDIVIDUAL INDUSTRIES

In this section details are given of major South Australian secondary industries. However, statistics relating to a number of important industries are not published in order to maintain confidentiality of details for individual businesses.

#### Meat and Abattoir By-Products

Most of the abattoirs in South Australia are located in country areas but the two largest establishments are within the Adelaide Statistical Division. Buoyant export markets (especially for beef) in 1972-73 resulted in considerable expansion in this industry. The figures for 1972-73 show an increase of 5.66 per cent in average employment and an increase of 21.66 per cent in value added over the previous year. Details of country butchers who slaughter livestock mainly for sale in their own retail shops are not included in the following table.

Statistical Division	Number of Establish- ments	Persons Employed	Wages and Salaries	Purchases, Etc.	Turnover	Value Added
1971-72:	Num	ber		\$*	000	
Adelaide Other	4.0	2 245 919	10 124 3 560	25 068 10 678	40 766 16 204	15 737 5 813
Total	26	3 164	13 683	35 746	56 971	21 550
1972-73: Adelaide Other	13 14	2 354 989	11 181 3 899	32 312 21 492	48 569 29 558	17 135 9 083

15 080

53 804

3 343

Meat and Abattoir By-products, South Australia

#### Wine and Brandy

Total .. .. ..

27

Winemaking has been established in this State for a long period. The industry employs both modern technology and traditional skills. Although relatively small by world standards the wine industry is important to Australia and particularly to this State. In 1972-73 South Australia accounted for 67 per cent of Australia's total wine production and 82 per cent of brandy. The size of the wineries in South Australia vary from small family-concerns to businesses employing about 200 persons.

A limited number of wineries still operate in the Adelaide metropolitan area but the three major areas in this State are the Barossa Valley, the Upper Murray irrigation areas and the Southern Vales area centred around Reynella and McLaren Vale. In recent years considerable development has taken place in the South East particularly at Coonawarra.

In 1972-73 twenty-four wineries employing 46.7 per cent of the total employment of the industry in South Australia operated in the Barossa Valley, fifteen wineries with 18.4 per cent of employment were located in the Upper Murray irrigation areas and twenty locations employing 11.1 per cent were in the Southern Vales area. The other locations are mainly in the metropolitan area, Clare and the South East of South Australia.

Wine:	and	Brandy.	South	Australia
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Statistical Division	Number of Establish- ments	Persons Employed	Wages and Salaries	Purchases, Etc.	Turnover	Value Added
1971-72:	Num	ber		\$'(	000	
Adelaide Other	26 48	646 1 638	2 055 5 172	10 160 28 349	15 489 40 419	7 498 17 838
Total	74	2 284	7 226	38 509	55 908	25 336
1972-73:						
Adelaide Other	30 53	682 1 791	2 159 6 390	14 032 32 806	19 410 50 904	6 623 22 422
Total	83	2 473	8 548	46 837	70 314	29 045

## **Printing and Publishing**

There are two large establishments producing newspapers in Adelaide. Newspaper printing offices are also located in most large towns, and a number of these produce newspapers for more than one locality. Particulars of general printing establishments, including the activities of the South Australian Government Printing Department, are also incorporated in the following table.

Printing and Publishing, South Australia

Statistical Division	Number of Establish- ments	Persons Employed	Wages and Salaries	Purchases, Etc.	Turnover	Value Added
1971-72:	Numi	per		\$'0	000	
Adelaide Other	176 43	4 534 407	17 988 1 265	20 866 856	54 513 3 139	34 146 2 303
Total	219	4 941	19 253	21 721	57 652	36 449
1972-73:						
Adelaide Other	172 44	4 586 410	20 301 1 434	22 420 979	59 595 3 633	37 210 2 667
Total	216	4 996	21 735	23 400	63 229	39 877

# Cement and Concrete Products

One firm produces cement at two locations in South Australia, one at Birkenhead and the other at Angaston. The Angaston cement plant, based on the limestone deposits, is an example of a manufacturing location being established near the source of the raw material. In 1972-73 thirty-eight plants produced ready-mixed concrete, of which eighteen were in the Adelaide Statistical Division and twenty were in country areas. Two firms produce concrete pipes at five separate locations of which two are in the country.

Statistical Division	Number of Establish- ments	Persons Employed	Wages and Salaries	Purchases, Etc.	Turnover	Value Added
1971-72:	Nun	nber		\$'0	000	
Adelaide Other	56 28	1 524 270	6 536 1 176	22 563 4 638	39 746 9 727	16 803 4 624
Total	84	1 794	7 712	27 201	49 472	21 426
1972-73: Adelaide Other	52 29	1 518 257	7 578 1 211	23 780 3 999	41 089 7 604	17 807 3 626
Total	81	1 775	8 789	27 779	48 693	21 433

#### Basic Iron and Steel

In 1941 a blast furnace was installed at Whyalla to utilise the iron ore from the Middleback Ranges. The ore is transported by rail a distance of 55 kilometres to Whyalla. Before 1965 Whyalla was the major source of Australia's foundry iron but this changed in 1965 when the Basic Oxygen Steelmaking (BOS) plant began producing steel. The BHP News of February 1975 reported that the two vessels at the BOS in the first decade of operation produced over 8.7 million tonnes of steel.

There are a number of large pipe and tube making firms located in and near Adelaide. These firms accounted for slightly more than 18 per cent of the Australian output of ferrous pipes, tubes and fittings. Details for these plants, together with details for establishments making basic forgings and castings of iron and steel, are included in the following table.

#### Basic Iron and Steel, South Australia

Statistical Division	Number of Establish- ments	Persons Employed	Wages and Salaries	Purchases, Etc.	Turnover	Value Adde
1971-72:	Num	ber		\$'0	000	
Adelaide Other	34 5	x x	x x	x x	x x	x x
Total	39	7 732	34 444	103 742	153 706	49 293
1972-73: Adelaide Other	28 4	x x	x x	x x	x x	x x
Total	32	7 661	39 932	112 415	170 519	56 428

#### Motor Vehicles and Parts

The largest single industry in South Australia and a major contributor to industrial growth since 1945 is the motor vehicle industry. However, as there are only a few firms engaged in motor vehicle production, no detailed figures are published for confidentiality reasons.

Immediately after the 1939-45 War, General-Motors Holden Pty Ltd prepared for the production of an Australian-built car, and volume production commenced in 1948. A number of major increases in productive capacity have been made by this firm involving not only considerable expansion at the Woodville site but also the establishment of a plant at Elizabeth.

Tonsley Park has become the centre of manufacturing operations for Chrysler Australia Ltd and in July 1967 the company expanded its operations to include a large foundry and engine plant at Lonsdale, near Port Stanvac.

These large motor vehicle plants in turn absorb the products of many establishments producing vehicle components. Other manufacturers produce omnibus and commercial vehicle bodies, fork lift trucks, garage equipment, trailers, caravans, and a wide range of vehicle accessories.

In 1972-73 establishments mainly engaged in the manufacture of motor vehicles and parts contributed 17 per cent of South Australia's total employment in manufacturing. It should be noted that this figure understates the importance of the motor vehicle industry to South Australia as some firms involved in the manufacture of components and accessories are classified to other industries. (For example, firms making rubber components for the motor industry are considered to be in the rubber industry.)

In terms of employment South Australia contributed nearly 23 per cent of the total Australian labour force in the motor vehicles and parts industry in 1972-73.

Statistical Division	Number of Establish- ments	Persons Employed	Wages and Salaries	Purchases, Etc.	Turnover	Value Added
1971-72:	Numl	per		\$'0	100	
Adelaide Other	94 6	21 074 18	92 430 40	210 152 115	318 269 187	112 391 72
Total	100	21 092	92 470	210 267	318 457	112 464
1972-73: Adelaide	101 5	20 626	100 430 39	216 052	346 793 172	124 840
Other	106	20 641	100 469	107 216 160	346 965	65 124 905

Motor Vehicles and Parts. South Australia

#### Transport Equipment other than Motor Vehicles

The most important manufacturing establishments included in the table below are the ship building locations at Whyalla and Birkenhead, and the large railway workshops at Islington and Port Augusta operated by the South Australian Railways and the Australian National Railways, respectively. The Birkenhead ship building location ceased production early in 1973-74.

In 1972-73 the transport equipment (other than motor vehicles) industries accounted for 5 per cent of the employment in manufacturing in South Australia. Motor vehicles and parts and other transport equipment together accounted for 22 per cent of total South Australian manufacturing employment.

#### MANUFACTURING

# Transport Equipment (Other than Motor Vehicles), South Australia

Statistical Division	Number of Establish- ments	Persons Employed	Wages and Salaries	Purchases, Etc.	Turnover	Value Added
1071 70	Numb	per		\$'0	000	
1971-72: Adelaide Other	41 23	3 054 2 676	11 985 11 302	14 459 18 088	26 046 31 542	12 597 16 214
Total	64	5 730	23 287	32 547	57 589	28 810
1972-73: Adelaide Other	47 24	3 360 2 725	14 658 13 062	14 401 21 906	29 262 37 111	14 904 15 264
Total	71	6 085	27 720	36 307	66 373	30 167

# Appliances and Electrical Equipment

For many years South Australia has been one of the leading States in the production of the larger household appliances, including refrigerators, washing machines and stoves. These items constitute a significant part of the total activity shown in the next table. Also represented are manufacturers of radios, television sets and components, waterheating systems, batteries and other electrical machinery.

This group of industries is the second most important in this State and in 1972-73 employed nearly 11 per cent of the total manufacturing labour force in South Australia. These industries, together with the motor vehicles and parts industry accounted for nearly 28 per cent of South Australia's manufacturing labour force and are susceptible to changes in demand for their products.

# Appliances and Electrical Equipment, South Australia

Statistical Division	Number of Establish- ments	Persons Employed	Wages and Salaries	Purchases, Etc.	Turnover	Value Added
1071 73.	Numl	per		\$'0	00	
1971-72: Adelaide Other	127 7	13 622 163	51 737 419	100 210 547	182 814 1 081	84 417 562
Total	134	13 785	52 157	100 757	183 894	84 980
1972-73: Adelaide Other	120 6	13 153 144	54 949 427	102 499 545	191 161 1 392	88 231 862
Total	126	13 297	55 376	103 045	192 553	89 092

PART 10

# COMMERCE

# 10.1 INTERNAL TRADE

Extensive statistics of retail trade have been collected and published over many years but the first full census of wholesale trade was conducted as part of the integrated Economic Censuses of 1968-69 which was discussed in detail on pages 446-57 of the South Australian Year Book 1971.

#### WHOLESALE TRADE

The term wholesale trade was used in the Wholesale Census in the broad sense to include the resale (by agents or principals) of new or used goods to retailers or other wholesalers or to institutional (including government), professional or other business users (including farmers and builders). The more important types of business engaged in wholesale trade are wholesale merchants, who take title to the goods they sell; manufacturers sales branches; commission agents, including import and export agents and purchasing agents; petroleum products distributors; and co-operative and marketing boards engaged in marketing farm products.

An indication of the level of wholesale trade in South Australia and Australia is given in the following table which includes details for the 1968-69 Wholesale Census.

Wholesale	<b>Establishments:</b>	South	Australia	and	Australia.	1968-69

Particulars	South Australia	Australia
	Numb	er
Establishments operating at 30 June 1969 Persons employed (a)	3 159 32 462	
	\$ mill	ion
Wages and salaries	87.0	1 045-3
received and other operating revenue	1 226.9	15 899-1
Stocks at 30 June: 1968	135.8	1 945.5
1969	144.9	2 343.4
Purchases, transfers in and selected expenses	1 006.7	13 524.0
Value added $(b) \ldots \ldots \ldots \ldots \ldots \ldots$	229.3	2 773.0

<sup>(</sup>a) At end of June 1969; includes working proprietors. (b) Sales on own account, transfers out and other operating revenue plus increase (or less decrease) in the value of stocks, less purchases, transfers in and selected expenses.

#### RETAIL TRADE

A Census of Retail Establishments and Selected Service Establishments for the year ended 30 June 1974 was conducted primarily to provide the necessary data to update the sample for the quarterly survey of retail sales. For this reason, bread and milk vendors, footwear repairers, motion picture theatres, and laundries and dry cleaners were not included and questions on purchases, stocks, capital expenditure, operating expenses, etc., were omitted from the census.

The 1973-74 Census thus included all establishments classified to retail trade in Subdivision 48 of the Australian Standard Industrial Classification (ASIC) with the exception of bread and milk vendors, footwear repairers and door to door salesmen. In addition the census included service establishments classified as cafes and restaurants; licensed hotels, motels and wine saloons; licensed clubs, and hairdressers and beauty salons.

The previous retail census taken for the year ended 30 June 1969 was conducted as part of the first integrated economic censuses which covered also wholesale, mining, manufacturing, electricity and gas production and distribution. These censuses were conducted on an integrated basis in 1968-69 in order to increase substantially the usefulness and comparability of economic statistics collected and published by the Bureau. Information was collected for the first time using a common framework of reporting units and data concepts and in accordance with a standard industrial classification. As a result the statistics covered by the censuses were provided with no overlaps or gaps in scope and in such a way that aggregates for economic data such as value added, employment, wages and salaries, fixed capital expenditure and stocks could be obtained on a consistent basis for all sectors of the economy covered by the censuses.

The definition of retail trade adopted in the 1973-74 Retail Census was the same as that used in previous censuses i.e. the sale of new and used goods to the final consumer for household and personal purposes. To conform with this definition sales of building materials, timber, commercial refrigerators and

freezers, agricultural machinery and implements, agricultural tractors, construction and earthmoving equipment were not treated as retail sales. For the same reason and because most retailers would have difficulty in providing separate details of the value of retail and wholesale sales of builders hardware and building supplies, grain, feed and fertilizers and agricultural supplies, business machines and equipment, these commodity items also, as in previous censuses, were not treated as retail sales.

For the 1973-74 Census, establishments which operated for part of the census year were included in the census only if they had operated for at least two months and were still operating at the end of June.

Retail and Selected Service Establishments: Summary of Operations by Industry Class, South Australia, 1973-74

Industry Class	Number of establish- ments at	Employment at end of June		Wages and	Retail Sales	Turnover
·	end of June	Males	Females	Salaries	Dates	(14)
		Number			\$'000	
Retail establishments:						
Department, variety and genera	1					
stores;	. 24	3 440	7 872	35 684	223 400	233 558
Department stores Variety stores and general stores		591	1 667	5 661	42 436	44 614
Food stores:	s 197	391	1 007	3 001	42 430	44 014
C.,	. 99	2 073	3 265	11 459	153 784	154 536
O	4 600	1 977	4 210	7 705	135 157	136 889
D	040	2 084	430	7 674	65 541	66 083
Fruit and vegetable stores	. 340	435	918	1 606	19 058	19 345
Liquor stores	. 61	119	70	498	7 480	7 758
Confectionery and soft drink	. 01	119	70	470	7 400	1 150
stores	. 628	638	1 746	2 480	30 634	31 168
Fish, chip and hamburger shops	. 628	766	1 096	2 085	22 446	22 880
Bread and cake shops	. 224	257	849	1 860	11 155	11 547
Clothing, fabric and furniture		231	049	1 900	11 133	11 34/
stores:	6					
Furniture and floor covering						
stores	. 215	1 269	520	6 782	60 520	61 466
Fabrics and household textile		1 209	320	0 /02	00 320	01 400
stores	. 221	187	661	1 690	14 039	14 184
Men's and boys' wear stores .	. 214	658	426	2912	22 832	23 211
Women's, girls' and infants' wear		030	420	2312	22 632	23 211
	. 532	263	1 783	4 224	35 875	36 001
Footwear stores	. 215	274 274	676	2 147	18 119	18 281
Household appliance and hardware		214	0/0	4 147	10 119	10 201
stores;	e					
Household appliance stores .	. 264	1 395	665	8 579	67 330	80 886
Household electrical appliance		1 393	003	0 319	07 550	00 000
	. 126	356	112	1 242	465	3 898
China, glassware and domestic		330	112	1 242	403	3 070
	. 174	268	324	1 094	8 542	10 208
Watchmakers and jewellers	. 186	310	384	1 674	10 580	12 224
Musical instrument and record		310	204	1 0/4	10 360	12 224
stores	. 73	129	133	637	6 630	6 764
Motor vehicle dealers, petrol and		129	133	037	0 030	0 704
tyre retailers:						
New motor vehicle dealers and	4					
motor vehicle repairers, n.e.c.		6 703	1 614	32 289	247 224	335 875
Used motor vehicle and part		0 /03	1 014	34 407	241 224	333 873
41	s . 267	1 070	271	5 483	64 666	73 960
Tyre and battery retailers and		1 0/0	2/1	3 403	UT 000	13 900
	1/5	1 158	181	6 003	34 814	42 786
		3 455	1 370	8 651	87 977	100 553
		1 599	220	5 576	291	18 006
Smash repair workshops Motor cycle dealers		318	90	1 489	12 098	19 730
		260	90	1 119	13 593	14 672
Boat and caravan dealers	. 62	200	99	1 113	13 333	14 0/2

Retail and Selected Service Establishments: Summary of Operations by Industry Class, South Australia, 1973-74 (continued)

Industry Class	Number of establish- ments at -			Wages and	Retail Sales	Turnover
	end of June	Males	Females	Salaries	Dates	(4)
Other retailers:		Number			\$'000	
Pharmacies	528	860	1 723	7 062	47 796	48 116
Photographic equipment stores	26	55	31	240	2 650	2 704
Sporting goods, bicycle and toy		33	31	240	2 050	2 704
shops	185	351	224	1 084	11 672	12 854
Newsagents, stationers and book	•					
sellers	397	615	876	2 281	26 831	27 199
Antique and second hand goods						
dealers	332	412	297	1 190	9 274	9 425
Nurserymen and florists	149	164	378	980	5 499	5 668
Retailers, n.e.c	221	259	321	997	5 636	6 710
Total retail establishments	11 190	34 768	35 502	182 137	1 526 044	1 713 759
Selected service establishments:						
Restaurants and licensed hotels:						
Cafes and restaurants	246	905	1 968	5 977	5 682	20 297
Licensed hotels, motels and wine		505	1 700	3711	J 002	20 271
saloons	635	5 043	6 210	33 066	112 252	149 343
Licensed clubs:		00.0	0210	00 000	112 204	11,50.0
Licensed bowling clubs	. 17	47	11	158	513	665
Licensed golf clubs	. 23	204	107	935	891	2 348
Licensed clubs, n.e.c	. 121	598	532	2 563	8 117	10 473
Hairdressing and beauty salons;						
Men's hairdressing	. 177	237	40	237	353	1 480
Women's hairdressing and beaut				4 4 4 4 4 4		40.00
saions	771	273	2 395	4 177	554	10 307
Total selected service						
establishments	1 990	7 307	11 263	47 113	128 362	194 913
Total retail and selected service establishments .		42 075	46 765	229 250	1 654 406	1 908 672

<sup>(</sup>a) Sales of goods (retail and wholesale) and all other operating revenue.

A comparison of retail trading in South Australia and in Australia during 1973-74 is shown in the following table. In this and in the earlier table showing employment and wages, employment figures include working proprietors but wages exclude the drawings of working proprietors.

Retail and Selected Service Establishments: South Australia and Australia 1973-74

Particulars	South Australia	Australia
	Numl	oer .
Establishments operating at 30 June 1974	13 180	151 120
Persons employed at 30 June 1974	88 840	984 964
	\$ mill	ion
Wages and salaries	229.3	2 739.0
Retail sales	1 654 • 4	19 070 - 7
Wholesale sales	84.2	1 403 • 2
Other operating revenue	170.1	2 259 · 8
Turnover	1 908 • 7	22 733 · 7

The value of sales of the commodity items collected in the 1973-74 Census are shown in the following table. Many establishments reported takings in more than one commodity item so that the number of establishments showing sales for individual items will exceed the total number of retail and selected service establishments.

Retail and Selected Service Establishments: Sales by Commodity Group South Australia, 1973-74

Commodity Item	Number of	Retail Sales of Goods				
Commodity Item	Number of — Establishments	Total	Sales Per Establishment	Sales Per Head of Population		
		\$'000	\$	\$		
Groceries, other food items, etc.:						
Groceries	2 802	192 949	68 860	159.4		
Fresh meat	1 163	80 819	69 490	66·7		
Confectionery, ice cream, soft	2.516	50 154	14 260	41-4		
drinks, etc	3 516 3 006	50 154 79 966	26 600	66.0		
Beer, wine and spirits, cigarettes, etc.:		79 900	20 600	00.0		
Beer, wine and spirits	1 033	127 317	123 250	105.2		
Cigarettes and other tobacco						
products	4 827	50 218	10 400	41.5		
Fabrics, clothing and footwear:						
Clothing and drapery	1 733	200 292	115 580	165-4		
Footwear	763	33 <b>575</b>	44 000	27.7		
Hardware:						
Domestic hardware, china, glass-						
ware, jewellery, watches and						
clocks (including garden equipment)	1 453	48 084	33 090	39.7		
equipment)	1 433	40 004	33 090	37 1		
Radios, radiograms, tape re-						
corders, television sets and						
accessories, musical instru-						
ments, records, sheet music,						
etc	580	39 072	67 370	32.3		
Domestic refrigerators and		••••	*****			
freezers, washing machines,						
freezers, washing machines, stoves, household heating						
appliances and other house-						
hold appliances (including						
bottled liquid petroleum						
_ gas)	543	56 384	103 840	46.6		
Furniture and floor coverings:						
Furniture, mattresses, blinds, etc.						
(including installation and			40000			
repairs)	364	45 609	125 300	37.7		
Floor coverings, carpets, lino,	•					
etc. including laying of floor		22.754	00.520	27.1		
coverings	354	32 754	92 530	27·1		
Motor vehicles, petrol boats, cara-	•					
vans, etc.: New motor vehicles, new and						
used motor cycles, hew and						
caravans	486	193 634	398 424	159-9		
Used motor vehicles	572	113 443	198 327	93.7		
New and used parts and access-	. 312	113 413	170 327	,,,,		
ories, petrol, oils, tyres,						
batteries, etc		150 857	76 577	124.6		
Miscellaneous:						
Cosmetics, perfumes, toilet pre-	-					
parations	1 774	24 129	13 600	19∙9		
Prescription and patent medi	-					
cines and therapeutic appli	-					
ances	. 836	35 387	42 330	29-2		
Books, stationery, newspapers,	, , , , , , ,	25 52-	01.750	21.2		
etc	1 735	37 737	21 750	31.2		
Goods not included above	2 191	62 022	28 310	51-2		
Total retail sales		1 654 406		1 366-4		
Total retail sales		1 034 400	• •	1 300.4		

#### Surveys of Retail Establishments

During periods between censuses, estimates of the value of retail sales are calculated from returns received from a sample of retail establishments covering businesses which account for approximately 45 per cent of all retail sales in Australia.

The sample of businesses from which the estimates of retail sales of goods are calculated was changed during 1972; the sample being based on the results of the 1968-69 Retail Census whereas the previous sample was based on the 1961-62 Census results adjusted and updated by a revision of the base values for survey purposes in 1966-67. Estimates for the December quarter 1972 were the first to be published from the new sample and values of sales of goods within commodity groups are not available for the year 1972-73.

The main differences in the scope and coverage between the two samples, apart from a certain amount of rationalisation between commodity groups, are the inclusion in the new survey of additional classes of busineses, particularly licensed clubs; the extended coverage of establishments such as newsagents engaged in delivery only, canteens and caterers; and the exclusion of bread and milk vendors (some previously included). Door to door sales are not included in either sample.

The following table shows the value of retail sales of goods in South Australia in broad commodity groups in the 1968-69 Census and retail survey estimates for the years 1973-74 and 1974-75, which are based on a sample selected from the 1968-69 Census. The sample based on the 1973-74 Census was introduced during 1976. The values of motor vehicles, parts, petrol, etc., and delivered bread and milk are excluded.

Value of Retail Sales: Commodity Groups, South Australia

Common ditas Common		Value of Retail Sales of Good			
Commodity Group	Commodity Group —			1974-75	
Groceries		128·1 53·0 85·7	\$ million 189·1 87·5 134·1	229·6 89·6 165·0	
Total food and groceries		266.8	410.7	484-2	
Beer, wine and spirits Clothing, drapery, etc. Footwear Hardware, china, etc. Electrical goods Furniture and floor coverings Chemist goods Newspapers, books and stationery Other goods		80·4 117·3 20·6 27·0 48·7 36·0 38·8 24·5 60·8	132·1 204·4 33·7 52·4 103·9 77·5 62·0 38·4 111·5	152·6 239·6 38·3 65·5 135·5 84·0 71·6 46·8 138·5	
Total		721.0	1 226.6	1 456.6	

# TOURIST ACCOMMODATION

The importance of tourism is recognised by a wide cross section of the community and this has caused a demand for comprehensive statistics on the industry. To satisfy requests from various organisations expressing a need for statistics on tourism the Bureau conducted a Census of Tourist Accommodation Establishments for the year ended 30 June 1974 to identify and measure the amount, type and location of accommodation available.

The Census covered establishments classified as hotels, motels and guest houses providing predominantly short-term accommodation (for periods of less than two months) to the general public. Caravan parks were also included. Establishments which had nil takings from accommodation or in which the number of short-term guests was less than long-term guests were excluded.

Census of Tourist Accommodation, South Australia, 1973-74

Size of Establishment (Guest Rooms)	Establish- ments	Guest F With all Facilities	Rooms Other	Employ at end of Full-time		Wages and Salaries	Takings from Accommo- dation
		Num				\$'(	000
			LICENSED I				
1-15	367	500	2 243	2 343	3 101	15 646	1 914
16-25	56	314	772	594	659	4 103	1 196
26 and over	40	1 344	506	823	928	6 042	3 937
Total	463	2 158	3 521	3 760	4 688	25 791	7 047
			LICENSED N	MOTELS			
1-15	7	71	7	20	29	72	158
16-25	15	275	34	55	131	385	710
26 and over	37	1 680	36	657	497	3 529	6 699
Total	59	2 026	77	732	657	3 986	7 567
		τ	UNLICENSED	MOTELS			
1-15	36	373	_	77	74	141	712
16-25	17	323	8	50	72	272	771
26 and over	16	548	47	71	133	533	1 631
Total	69	1 244	55	198	279	946	3 114
		DOTMATE	HOTELS AND	GUEST HOUS	ee.		
1-15	22	29	169	38	30	56	161
1606	6	29	116	10	5	11	69
26 and over	Ř	26	389	35	42	207	432
Total	36	55	674	83	77	274	662
		то	TAL ESTABL	ISHMENTS			
1-15	432	973	2 419	2 478	3 234	15 916	2 946
16-25	94	912	930	709	867	4 772	2 746
26 and over	101	3 598	978	1 586	1 600	10 310	12 698
Total	627	5 483	4 327	4 773	5 701	30 998	18 390

In addition to type of establishment and type of guest, information was sought on the capacity of accommodation with and without facilities, *i.e.* rooms with private bath/shower and toilet, employment, wages, takings from accommodation, meals and liquor sales. Details collected for caravan parks included

the number of sites, on-site vans and cabins. The various items of data were tabulated for regions within the State and information for some items, depending on the number of establishments operating, is available for individual local government areas.

To support the census information a series of accommodation surveys has been introduced to provide an indication of the utilisation of the accommodation available by measuring occupancy rates. The results of the first survey during the three months July to September 1975 showed that room occupancy rates for South Australia averaged 48.9 per cent in licensed hotels with facilities and 61.4 per cent in motels etc. with facilities whereas in establishments without facilities the rate fell to 28.7 per cent. Takings from accommodation in all establishments during the three months totalled \$5.4 million.

#### 10.2 OVERSEAS TRADE

#### LEGISLATION AFFECTING OVERSEAS TRADE

The power to make laws with respect to trade and commerce with other countries was conferred on the Australian Parliament by the Commonwealth of Australia Constitution Act, Section 51(i). Under Section 86 of the Constitution, the collection and control of duties of customs and excise passed to the Australian Government on 1 January 1901. Other references to trade and commerce are contained in Sections 87 to 95 of the Constitution.

The legislation affecting overseas trade includes the Customs Act, the Customs Tariff, and the Customs Tariff (Dumping and Subsidies) Act. The Customs Act is the administrative Act under which the Bureau of Customs of the Department of Business and Consumer Affairs operates, while the Customs Tariff provides the statutory authority for imposing the actual rates of duty operative from time to time and the Customs Tariff (Dumping and Subsidies) Act provides protection for Australian industry against various forms of unfair trading.

#### The Customs Tariff

The first Australian Customs Tariff was introduced by Resolution on 8 October 1901, from which date uniform duties for each State came into effect throughout Australia. The tariff has since been extensively amended—the last major amendment was in 1965 when the tariff was re-issued in Brussels Nomenclature form.

The Australian Customs Tariff has been developed in conformity with the policy of protecting economic and efficient Australian industries and of granting preferential treatment to particular imports from certain countries of the British Commonwealth. Duties are also imposed on some goods, generally of a luxury nature, for revenue purposes. Customs collections are an important source of revenue, but in its protective character the tariff has an influence also on the Australian economy. The present tariff provides for preferential and general rates of duty.

The preferential rates apply to goods which are the produce or manufacture of the United Kingdom, Ireland, Canada, New Zealand and Papua New Guinea. The preferential treatment applies also to the products of countries

which have been declared to be preference countries. At present the preference countries are comprised mainly of members of the British Commonwealth of Nations and most of the United Kingdom's dependencies. Certain less developed countries are given preferential treatment for selected products.

General rates apply to goods from all countries which do not qualify for preferential rates of duty under a particular tariff classification.

## Primage Duties

In addition to the duties imposed by the Customs Tariff, ad valorem primage duties at rates of 3.75 per cent, 7.5 per cent or 10 per cent are charged on some goods according to the type and origin of the goods. Goods which are the produce or manufacture of New Zealand, Norfolk Island, Fiji, Cocos Islands, Christmas Island or the Territory of Papua New Guinea, are exempt from primage duty.

#### By-laws

Under Customs by-laws, goods may be admitted free of duty or at rates of duty lower than those normally applicable. A pre-requisite for by-law admission is that suitably equivalent goods are not reasonably available from Australian production. There are provisions under the by-law system for remitting duty in certain circumstances on imported goods which are to be incorporated in goods for export.

# Anti-dumping Legislation

The Customs Tariff (Anti-Dumping) Act 1975 provides protection for Australian industry against various forms of unfair trading. This Act authorises the imposition of a dumping duty when goods are sold to Australia at a price which is less than the normal value of the goods, or a countervailing duty on subsidised goods, where the dumping or subsidy causes or threatens material injury to an Australian industry. Special duties may be collected also if dumped or subsidised goods are imported to the detriment of the trade of a third country in the Australian market.

#### **Import Controls**

A system of import licensing was introduced in 1939 as a war-time measure. In the post-war years these controls were gradually relaxed but were re-imposed in 1952. In 1962 most of these restraints were lifted but some goods remain under control for reasons associated with the protection of certain Australian industries. The Customs (Prohibited Imports) Regulations list those commodities the import of which is prohibited absolutely, or restricted, on social grounds. Other items are prohibited, or restricted, on health grounds (human, animal or plant) by the Quarantine Act 1908-1973 and the Therapeutic Goods Act 1966-1973.

#### **Export Controls**

Under Section 112 of the Customs Act the export of goods from Australia may be prohibited absolutely, prohibited to a specified place, or prohibited unless prescribed conditions or restrictions are observed.

The Banking Act 1959-1974 contains provision to ensure that the full proceeds of goods exported from Australia are received into the Australian banking system and that these proceeds are received in the currency and in the manner prescribed by the Reserve Bank of Australia.

#### ADVISORY AUTHORITIES ON OVERSEAS TRADE

#### Industries Assistance Commission

The Tariff Board was replaced on 1 January 1974 by the Industries Assistance Commission appointed under the *Industries Assistance Commission Act* 1973. The Commission consists of not less than five and not more than nine members and its function is to hold inquiries and make reports to the Minister for Business and Consumer Affairs in respect of matters affecting assistance to industries and any other matters that may be referred to it in accordance with the Act.

The Minister is required to refer to the Commission for inquiry and report on among other matters, the necessity for new, increased or reduced import duties; the necessity for prohibition or restriction of importation of any goods into Australia, or the extension, reduction or removal of any such existing restriction; the necessity to provide financial assistance to an industry by the Australian Government or for increase, reduction or withdrawal of such assistance.

The Minister may refer to the Commission for inquiry and report on the classification of goods in the Customs Tariff or Excise Tariff and matters in connection with the interpretation of these tariffs; the question of the value for duty of goods; whether goods not prescribed in departmental by-laws should be so prescribed; and any matters in respect of which action may be taken under the Customs Tariff (Anti-Dumping) Act 1975.

# Temporary Assistance Authority

The Minister for Business and Consumer Affairs may also request the Temporary Assistance Authority to inquire into cases where urgent action appears necessary to protect an Australian industry against import competition pending receipt and consideration of a full report by the Industries Assistance Commission. The Temporary Assistance Authority's report must be submitted to the Minister within thirty days of the making of the request. Temporary protection recommended by the Temporary Assistance Authority may be imposed only if the matter is under reference to the Industries Assistance Commission and may operate only for a period of up to three months after the date of receipt by the Commission of the final report on the goods concerned.

#### ENCOURAGEMENT OF OVERSEAS TRADE

#### Trade Commissioner Service

The Trade Commissioners Act 1933-1973 provides for the appointment of Trade Commissioners and Assistant Trade Commissioners for Australia in such places as the Governor-General determines.

In 1957 Australia's official commerical representation was extended by the introduction of a system of Trade Correspondents. These correspondents who are appointed in countries where there is no Trade Commission, are engaged on a part-time basis and operate under the general direction of the Trade Commissioner in whose area they are located.

The Trade Commissioner Service is administered by the Department of Overseas Trade and is responsible for overseas commercial intelligence. Particular facilities offered to Australian exporters and export organisations include market surveys, advice on selling and advertising methods, arranging introductions with buyers and agents, providing reports on the standing of overseas firms, assisting business visitors and organising trade missions, trade displays and other publicity and promotion media.

Trade Commissioners participate in inter-governmental negotiations on economic and commercial matters and where necessary make representation to Government authorities of the countries in which they are located on behalf of the Australian Government and Australian firms. A Trade Commissioner may also be called upon to act as the Australian Government representative in areas where there is no Australian diplomatic or consular mission.

In a number of cities where there is a diplomatic or consular mission but no Trade Commissioner, Marketing Officers are appointed to assist Australian businessmen. They work under the direction of the Trade Commissioner whose territory includes the city in which the Marketing Officer is based.

## **Export Market Development Grants**

The Export Market Development Grants Act 1974 authorised the establishment of the Export Development Grant Board, to administer the grants scheme. The scheme—operative for five years from 1 July 1974—replaced the Export Market Development Allowance and Export Incentive Grants Schemes which expired on 30 June 1974. The grants are designed to encourage Australian exporters and prospective exporters to seek out and develop overseas markets for products, services, industrial property rights and know-how, which are substantially of Australian origin.

#### **Export Finance and Insurance**

The Export Finance and Insurance Corporation Act 1974, which came into operation on 1 February 1975, established the Export Finance and Insurance Corporation as a body corporate with the statutory duty of encouraging overseas trade and commerce.

The Corporation operates on commercial lines and assumes all the functions which, since 1957, had been performed by the Export Payment Insurance Corporation whose assets, liabilities and commitments were transferred to the new Corporation on 1 February 1975. These functions include the provision of a specialised range of insurance facilities to Australian exporters and investors and the giving of guarantees to banks and other lending institutions in support of export business.

The Corporation is additionally empowered to provide a direct lending facility. This new lending facility is for the purpose of financing, at internationally competitive interest rates, exports of machinery and equipment

(and services associated with the export of such goods) sold on extended credit terms, especially if the credit period exceeds five years.

#### South Australian Trade Representatives

One of the functions of the Agent-General for South Australia, located in London, is to foster trade with the United Kingdom and other countries. There are also agencies in four Asian cities—Tokyo, Kuala Lumpur, Singapore and Djakarta—to investigate trade opportunities in these areas.

#### TRADE AGREEMENTS

The General Agreement on Tariffs and Trade (GATT), of which Australia is an original member, is an international trade agreement which has been in operation since 1 January 1948. The objectives of the GATT include the expansion of world trade and the raising of living standards throughout the world. The essential features of the GATT are the schedules of tariff concessions which its members have agreed to apply consequent to tariff negotiations with each other, the application of most-favoured-nation treatment among its members, the avoidance of trade discrimination, and a code of agreed commercial policy rules for fair international trading.

Six series of tariff negotiations have been conducted. As a result of the first five, Australia obtained tariff concessions on almost all the principal products of which it is an actual or potential exporter to the individual countries concerned.

The sixth series of tariff negotiations, the Kennedy Round, was based on a plan for linear tariff cuts by industrial countries on all industrial products, with a minimum of exceptions, and on the reduction of non-tariff barriers to trade and the creation of acceptable conditions of access to world markets for agricultural products. It began in May 1964 and concluded in May 1967. The average reduction in tariffs on industrial goods was approximately one-third, while in agriculture the most important item was the agreement reached on the basis for a world grains agreement (now superseded by later agreements; see International Grains Agreement page 428).

A seventh round of negotiations, held under the auspices of GATT, was inaugurated at a meeting of Ministers from over one hundred countries in Tokyo, Japan in September 1973. The new round is concerned with further reductions in tariffs on industrial goods and aims to lower tariff and non-tariff barriers to trade in manufactures and primary products, with particular emphasis on products important to the trade of developing countries.

Australia is also a party to trade agreements with a number of individual countries. These agreements are of two main types, preferential and other.

Preferential agreements are currently operative with Canada, Malaysia and New Zealand. In general these agreements provide for the exchange of preferential rates of duty on a range of commodities traded between Australia and the countries concerned.

Other agreements currently in force are those concluded with Japan (1964) Philippines (1965), Republic of Korea (1965), USSR (1965, 1973), Bulgaria (1966), Poland (1966), Hungary (1967), Romania (1967), Yugoslavia (1970),

Czechoslovakia (1972), Indonesia (1972), the People's Republic of China (1973) and the German Democratic Republic (1974). These agreements relate to the operation of most-favoured-nation treatment and the development of trade in accordance with this principle between Australia and the country concerned.

There is also an agreement establishing a free trade area between Australia and New Zealand (NAFTA).

Details of these agreements are contained in various issues of the Official Year Book of Australia.

#### METHOD OF RECORDING IMPORTS AND EXPORTS

Overseas trade statistics are compiled from documents obtained under the Customs Act 1901-1975. Statistics for South Australia apply to the imports into and exports from Australia which are documented (entered or cleared) at Customs recording points in South Australia.

Imports do not provide a record of the overseas goods used or consumed in South Australia, as some of the goods pass subsequently to other Australian States and some goods imported through other States pass into South Australia. Similarly, exports include some products of other States documented in South Australia, but exclude products of South Australia documented in other States. Commodities transported by sea, air or parcels post are included.

Since the introduction of container shipping early in 1969 containerised goods may be documented as South Australian exports or imports even though loaded or unloaded at ports in other States, particularly Melbourne. The interstate movement of the goods is predominantly by rail.

All values in overseas trade statistics are determined on a 'free on board (f.o.b.) port of shipment' basis. This means that all charges, in particular the cost of freight and insurance, incurred after the goods have been exported from the port of shipment are excluded. Only transport and service charges incurred before export are included in the determination of trade values.

The procedure adopted to value exports and imports is as follows:

#### Exports:

- (a) Goods sold to overseas buyers before export are valued at the Australian f.o.b. port of shipment equivalent of the actual price at which the goods were sold;
- (b) Goods shipped on consignment are valued at the Australian f.o.b. port of shipment equivalent of the price paid for similar goods of Australian origin in the principal markets of the country to which they are dispatched for sale.

#### Imports:

The recorded value of goods imported is the amount on which duty is payable or would be payable if the duty were ad valorem. Value for duty is the f.o.b. port of shipment equivalent of either:

- (a) the actual price paid or to be paid by the Australian importer plus any special deduction (transactions value); or
- (b) the 'current domestic value' of the goods, whichever is the higher.

'Current domestic value' is defined as 'the amount for which the seller of the goods to the purchaser in Australia is selling or would be prepared to sell for cash, at the date of export of those goods, the same quantity of identically similar goods to any and every purchaser in the country of export for consumption in that country'.

#### Inclusions and Exclusions

Export tabulations do not include the value of stores loaded on aircraft and ships (e.g. aircraft fuel, bunker oil, food and drink for passengers and crew, and ships' fittings installed on overseas-owned ships in Australian ports). Outside packages (containers, crates) are included as a separate item in imports. For exports, however, the value recorded for each item includes the value of the outside package. Particulars of direct transit trade through Australia are not recorded.

#### Countries

'Country of origin' appearing in import tables should be taken to mean the country of production. 'Country of consignment' appearing in export tables means the country to which goods were consigned so far as this can be determined at the time of export. Where the country of consignment is not determined at the time of export, goods are shown as exported 'For orders'.

# OVERSEAS TRADE OF SOUTH AUSTRALIA IMPORTS

The total value of overseas imports into South Australia during 1974-75, \$482·1 million, was \$168·2 million above the level of 1973-74. Increases occurred in nearly every commodity group, in particular, mineral fuels and lubricants, transport equipment and machinery other than electric.

# Overseas Imports to South Australia, Principal Commodity Groups

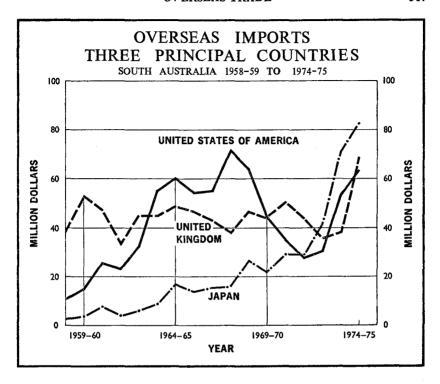
Commodity Group	1971-72	1972-73	1973-74	1974-75
		\$'(	000	
Food and live animals	6 795	5 851	9 288	12 799
Beverages and tobacco	1 432	1 211	1 624	1 750
Crude materials, inedible: Crude rubber	1 382 6 795 748 5 152 2 270	1 480 9 715 843 4 986 2 698	2 563 16 615 2 053 9 025 2 071	1 577 14 270 542 14 189 1 481
Mineral fuels, lubricants	22 147	22 337	40 283	94 691

Overseas Imports to South Australia, Principal Commodity Groups (continued)

Commodity Group	1971-72	1972-73	1973-74	1974-75
		\$'0	00	
Animal and vegetable oils and fats	358	253	635	905
Chemicals: Chemical elements and com-				
pounds	2 725	2 510	4 153	4 621
Plastics and artificial resins	3 385	3 578	5 018	6 511
Other	5 072	4 108	5 613	7 249
Manufactured goods: Paper and paperboard manu-				
factures	5 372	5 801	8 899	12 035
articles	11 082	11 284	16 347	19 736
factures, n.e.s.	5 865	6 428	7 276	11 840
Iron and steel	9 142	7 701	30 222	21 809
Non-ferrous metals	1 433	1 576	2 768	2 494
Manufactures of metal, n.e.s	3 970	4 084	5 703	9 371
Other	5 130	6 189	10 191	12 979
Machinery and transport equipment:				
Machinery, other than electric Electrical machinery and appli-	28 229	34 321	38 850	69 001
ances	14 835	15 251	22 318	33 404
Transport equipment	25 474	25 337	42 326	80 276
Miscellaneous manufactured articles	15 455	16 391	23 692	39 820
Commodities and transactions not classified to kind	5 499	6.045	6 380	8 730
Classifica to killa	J <del>4</del> 79	0 043	0 300	6 / 30
Total	189 748	199 978	313 915	482 077

During 1974-75, Japan supplied \$92.4 million of imports, \$21.6 million more than in 1973-74. The main increases were in imports of road motor vehicles and parts in the 'transport equipment' commodity group. Although there was an increase in imports from the United Kingdom (\$37.8 million in 1973-74 and \$68.5 million in 1974-75), Saudi Arabia (\$70.5 million) became the second most important source of imports.

The proportions of imports obtained from the major sources have changed considerably in the years since the 1939-45 War e.g. in 1953-54 Japan supplied only 0.46 per cent of the total value of imports into South Australia but in 1974-75 accounted for 19.2 per cent; United Kingdom which supplied over half the imports in 1953-54 accounted for only 14.2 per cent in 1974-75, and imports from the United States of America which accounted for 8.9 per cent of total imports into South Australia in 1953-54, and 32.7 per cent in 1967-68, have gradually declined to 13.1 per cent in 1974-75.



Overseas Imports to South Australia, Principal Countries

Country of Origin	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Canada	11 737	10 265	9 253	11 047	15 752
France	2 560	2 150	2 910	5 389	10 861
Germany, Federal Republic of	9 229	10 534	11 855	19 005	31 304
Hong Kong	1 786	1 900	2 393	3 523	6 866
Italy	3 747	3 698	3 765	6 273	13 879
Japan	28 643	28 612	40 955	70 852	92 430
Kuwait	1 015	2 645	2 045	5 776	9 738
Nauru, Republic of	1 507	575	1 229	3 175	5 848
Netherlands	5 707	7 420	4 199	6 836	9 296
New Zealand	3 194	3 502	3 795	5 638	6 787
Saudi Arabia	17 886	17 022	15 490	30 245	70 514
Singapore	1 032	1 450	2 163	2 654	5 079
United Kingdom	49 789	43 330	34 981	37 781	68 479
United States of America	34 348	27 473	30 152	53 087	63 140
Other	26 178	29 172	34 793	52 634	72 104
Total	198 358	189 748	199 978	313 915	482 077

The following table shows, by commodity groups, the imports from principal countries during the year 1974-75. In comparison with 1973-74, imports of transport equipment (mainly road motor vehicles and parts) from Japan and the Federal Republic of Germany, increased by \$16.5 million to \$43.2 million and \$4.5 million to \$6.4 million respectively. Imports of machinery from the United Kingdom and the United States of America increased by \$11.5 million to \$26.0 million and \$10.4 million to \$24.8 million respectively. Imports of textiles from the United States of America increased by \$3.1 million to \$5.4 million.

# Overseas Imports to South Australia from Principal Countries Commodity Groups, 1974-75

Commodity Group	Germany, Federal Republic of	Japan	Saudi Arabia	United Kingdom	USA	Total (a)
		\$'000				
Food and live animals: Fish and fish preparations Coffee, tea, cocoa, spices Other	. 60 . 4 . 56	1 692 332	Ξ	307 131 1 431	60 2 1 128	3 775 456 8 568
Beverages and tobacco	. 106		_	608	13	1 750
Crude materials, inedible: Crude rubber Wood, timber and cork Textile fibres and waste Crude fertilisers and crude minerals Other		92 -51 222 14		14 3 	399 3 355 836 103	1 577 14 270 542 14 189 1 481
Mineral fuels, lubricants	. 59	13	70 514	213	308	94 691
Animal and vegetable oils and fats	. 6	1	_	30	8	905
Chemicals: Chemical elements and compounds Plastic materials and artificial resins Other	. 873	879 864 368	=	740 1 716 2 752	1 314 1 339 1 453	4 621 6 511 7 249
Manufactured goods: Rubber manufactures Paper, paperboard and manufactures Textile yarn, fabrics, made-up articles Non-metallic mineral manufactures, n.e.s Iron and steel Non-ferrous metals Manufactures of metal, n.e.s. Other	. 670 . 217 s. 620 . 1179 . 189 . 799	1 904 901 2 601 3 062 12 537 114 2 258 121	-	2 462 861 2 170 1 498 1 644 679 2 454 610	1 055 535 5 356 633 3 697 725 1 412 328	8 600 12 035 19 736 11 840 21 809 2 494 9 371 4 379
Machinery and transport equipment:  Machinery, other than electric  Electrical machinery and appliances  Transport equipment  Transport equipment		6 535 8 435 43 240	Ξ	18 961 7 052 11 266	19 787 5 039 7 272	69 001 33 404 80 276
Miscellaneous manufactured articles	. 6 158	4 064	-	9 741	5 397	39 820
Commodities and transactions no classified to kind	t . 485	2 132	_	1 097	1 585	8 730
Total	. 31 304	92 430	70 514	68 479	63 140	482,077

<sup>(</sup>a) Includes 'other'.

#### **EXPORTS**

The total value of overseas exports from South Australia during 1974-75 was \$764.4 million, \$101.5 million above the level of 1973-74. There were considerable increases in exports of wheat (an all-time record of \$163.4 million); iron and steel (a record of \$73.7 million) and barley (\$99.5 million). Exports of wool, beef, lamb and mutton showed a marked decrease.

# OVERSEAS TRADE

# Overseas Exports from South Australia, Principal Commodities

Commodity	1970-71	1971-72	1972-73	1973-74	1974-75	
		QUANTITY				
Beef, lamb and mutton ('000 kg)	1 616 580	34 215 1 209 432 848 219	37 760 924 702 334 397	23 635 996 944 469 072	24 693 1 190 166 922 053	
Wool: Greasy ('000 kg) Other ('000 kg) Ores and concentrates:	80 681 5 736	85 421 11 740	90 676 5 760	65 030 4 956	62 120 4 586	
Iron ('000 tonnes)	1 379 136 958 89 134	2 064 132 239 97 051	1 123 152 874 434 750	1 087 138 069 369 672	930 116 063 547 303	
Unassembled (No.)	20 908 1 860	16 412 1 890	41 869 1 479	n.a. 1 579	n.a. 591	
Beef, lamb and mutton	79 445	18 550 61 363 35 652	30 554 46 251 17 250	25 495 98 674 40 790	16 347 163 411 19 517	
Wool:						
Greasy	55 520 7 308	61 111 7 077	137 329 12 627	138 895 14 307	84 744 8 528	
Ores and concentrates:						
Iron		11 677 28 718	10 606 37 374	10 394 46 556	11 695 44 212	
Iron and steel; blooms, billets etc Passenger motor cars:	7 394	6 123	27 910	32 176	73 658	
Unassembled	9 155 3 461	7 434 2 735	19 045 3 680	31 247 4 499	23 410 1 653	

# Overseas Exports from South Australia, Principal Commodity Groups

Commodity Group	1970-71	1971-72	1972-73	1973-74	1974-75
Food and live animals:			\$'000		
Meat and meat preparations	18 746	20 389	34 942	28 311	17 800
Dairy products and eggs	5 642	5 508	8 238	6 099	5 705
Cereal grains and cereal preparations	108 605	102 253	66 900	147 027	276 412
Fruit and vegetables	7 752	9 581	9 870	11 863	8 424
Other	8 008	10 612	14 548	16 353	16 068
Beverages and tobacco	2 539	2 907	2 593	3 575	2 933
Crude materials, inedible (except fuels):					
Hides and skins	6 638	6 461	14 532	11 679	7 127
Textile fibres and their waste	62 863	68 278	149 997	153 133	93 487
Metalliferous ores and metal scrap	57 499	52 112	48 460	74 009	87 437
Other	4 302	4 578	4 371	3 664	5 029
Mineral fuels, lubricants	1 276	1 257	1 227	1 529	4 129
Animal and vegetable oils and fats	2 664	3 545	2 617	3 941	4 228
Chemicals	800	533	1 275	2 402	4 735
Manufactured goods			• •		
Iron and steel	12 005	10 375	33 240	39 624	80 548
Non-ferrous metals	43 593	39 446	47 962	59 124	71 296
Manufactures of metals, n.e.s	2 439	4 438	4 554	3 990	9 348
Other	4 254	4 644	7 717	8 569	9 756
Machinery and transport equipment	38 628	41 291	62 8 19	80 759	53 010
Miscellaneous manufactured articles	2 466	4 804	4 922	6 020	5 850
Commodities and transactions not classified to	~ 400	. 004	. 744	0 020	3 650
kind	3 017	1 052	935	1 207	1 086
Total	393 737	394 064	521 720	662 881	764 410

Exports of manufactured goods have been increasing but the bulk of exports is still of goods usually classified as primary products. In 1974-75 the 'Crude materials, inedible' group accounted for \$193.1 million, or 25.3 per cent of exports (including wool \$93.3 million, 12.2 per cent), and the 'Food and live animals' group accounted for \$324.4 million or 42.4 per cent (including wheat \$163.4 million, 21.4 per cent and beef \$10.5 million, 1.4 per cent).

Exports to principal countries during the year 1974-75 classified by commodity groups are shown below.

Overseas Exports from South Australia to Principal Countries

Commodity Groups, 1974-75

Commodity Group	Germany, Federal Republic of	Japan	New Zealand	South Africa, Republic of	United Kingdom	USA	Total (a)
Food and live animals:				\$,000			
Meat and meat preparations Dairy products and eggs	_64	1 459 3 391	_	376	1 849 4	8 047 273	17 800 5 705
Fish and fish preparations Cereal grains and cereal	34	2 455	3	689	293	3 563	8 214
preparations	842 326 156	36 885 925 608	12 823 844 24	87 1 118	1 575 882 408	(670 583	b)276 412 8 424 7 855
Beverages and tobacco	5	265	310	1	405	161	2 933
Crude materials, inedible:							
Hides, skins and fur skins Textile fibres and their waste Metalliferous ores and metal	226 9 674	75 18 108	6 39	18 42	322 3 352	11 131	7 127 (c)93 487
scrap	10 741 137	42 968 138	1 1 604	111 132	6 769 353	84 165	87 437 5 028
Mineral fuels and lubricants		561	1 252	_			4 129
Animal and vegetable oils and fats	14	4	14	1 871	33	43	4 228
Chemicals	5	6	172	579	423	55	4 735
Manufactured goods classified chiefly by material:							
Iron and steel Non-ferrous metal manu-	21 743	1 881	6 956	371	_	1 969	(d)80 548
factures	2 262	14 125 127	8 880 1 925	98 506	20 421 1 330	1 686	71 296 19 105
Machinery and transport equip- ment:							
Machinery, other than electric Electrical machinery and		65	1 664	2 397	304	1 173	13 803
appliances	361 14	132 585	1 810 12 299	93 11 1 <b>3</b> 0	1 877 1 930	514 46	6 474 32 733
Miscellaneous manufactured articles	289	277	717	467	840	710	5 850
Commodities and transactions not classified to kind	248	2	85	5	281	48	1 086
Total	47 219	125 042	51 429	19 084	43 650	19 932	764 410

<sup>(</sup>a) Includes 'other'.

<sup>(</sup>b) Mainly to Iraq (\$41 303 033); USSR (\$26 876 592) and Republic of Korea (\$15 210 317).

<sup>(</sup>c) Mainly to USSR (\$18 649 509); France (\$9 594 373) and Federal Republic of Germany (\$9 673 670).

<sup>(</sup>d) Mainly to Federal Republic of Germany (\$21 743 032) and Argentina (\$21 218 491).

The following table shows the value of exports to principal countries during each of the years 1970-71 to 1974-75. Japan replaced United Kingdom as South Australia's principal export market in 1966-67 and has retained that position. In 1974-75 Japan took goods valued at \$125.0 million, 16.4 per cent of total exports, compared with \$129.1 million (19.5 per cent) in 1973-74. New Zealand (\$51.4 million, 6.7 per cent) remained the second largest market in 1974-75. There was a large increase in exports to the Federal Republic of Germany (\$23.3 million to \$47.2 million) and USSR (\$39.1 million to \$45.5 million).

# Overseas Exports from South Australia, Principal Countries

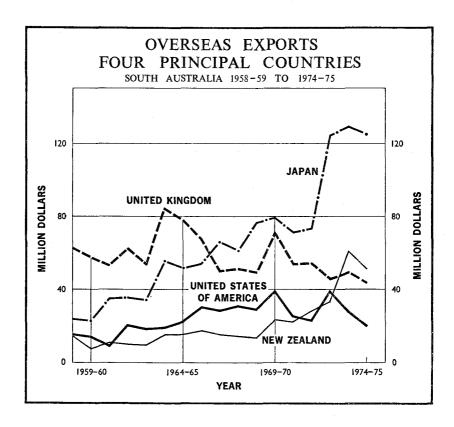
Country of Consignment	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Chile	1 821	5 986	5 605	10 785	7 363
China, People's Republic of	14 056	834	1 848	10 633	15 675
France	10 184	12 892	23 363	19 410	15 741
Germany, Federal Republic of	11 112	13 102	32 264	23 320	47 219
ndia	9 124	7 699	10 692	17 882	20 039
ndonesia	2 091	2 258	7 343	14 419	13 416
ran	1 795	5 546	6 960	12 019	18 190
raq,	15 787	8 629	18	11 725	41 532
taly	4 719	7 086	10 823	15 210	8 736
apan	71 162	73 462	124 616	129 074	125 042
Netherlands	6 752	5 831	4 710	12 739	21 739
New Zealand	22 272	28 422	33 458	60 822	51 429
Philippines	6 950	4 217	5 523	17 204	12 449
Saudi Arabia	3 993	3 837	2 605	12 063	44:
outh Africa, Republic of	18 420	12 948	21 945	27 828	19 084
Jnited Kingdom	53 955	54 515	46 114	49 346	43 650
Inited States of America	25 158	23 012	38 952	28 027	19 932
JSSR	10 722	10 361	29 449	39 084	45 53
Other	103 665	113 427	115 433	151 288	237 196
Total	393 737	394 064	521 720	662 881	764 410

# **Exports of Wool**

In 1974-75 the major export markets for South Australian wool were, USSR (\$18.7 million, 20.1 per cent), and Japan (\$18.1 million, 19.4 per cent).

# Overseas Exports of Wool from South Australia

Country of Consignment	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Belgium-Luxembourg	3 475	1 973	4 919	4 162	2 165
France	4 807	7 386	12 038	10 821	9 594
Germany, Federal					
Republic of	4 184	4 796	9 589	5 263	9 671
Italy	3 000	3 463	6 420	6 889	4 017
Japan	19 999	22 344	60 717	37 002	18 108
Netherlands	761	1 987	2 145	5 236	3 602
Poland	732	2 012	5 050	7 744	2 734
United Kingdom	4 101	4 798	7 709	6 080	3.348
USSR	8 324	6 898	13 800	39 084	18 650
Yugoslavia	1 051	681	4 794	7 022	3 650
Other	12 393	11 851	22 773	23 900	17 735
Total	62 828	68 189	149 956	153 202	93 273



# **Exports of Wheat**

The total value of wheat exported from South Australia in 1974-75, \$163.4 million was a record; this was \$64.7 million higher than the previous record of \$98.7 million in 1973-74.

The relative importance of countries of consignment fluctuates from year to year. In 1972-73 the USSR was the principal market for wheat from South Australia (33.8 per cent) but in 1973-74 it did not take any wheat from this State. In 1974-75 it returned as a major buyer with \$22.1 million (13.5 per cent), replacing Chile as the second largest market. Iraq became the principal market in 1973-74 (\$11.3 million, 11.4 per cent) and increased it's market share in 1974-75 to 25.3 per cent with \$41.3 million.

# Overseas Exports of Wheat from South Australia

Country of Consignment	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Arab Republic of Egypt	12 292	14 214	2 595	8 688	13 094
Chile		5 986	5 605	10 785	7 355
China, People's Republic of	4	_	1 456	9 551	15 323
India	1 322		_	6 007	5 321
Indonesia			4 709	9 598	4 055
Iraq		8 * 59		11 265	41 303
New Zealand	2 252	2 ∠78		5 116	12 819
Saudi Arabia	2 869	3 <b>275</b>	1 132	10 297	11
Sri Lanka	2 792	3 464	5 114	7 232	11 549
USSR		2 648	15 648		22 149
Yemen, Arab Republic of	2 761	4 516	1 450	5 071	1 169
Other	23 586	16 413	8 541	15 064	29 262
Total	79 445	61 363	46 251	98 674	163 411

# TRADE AT PRINCIPAL PORTS

Over 79 per cent of imports are unloaded at Port Adelaide but the proportion of exports loaded there is much lower—in 1974-75 it was approximately 47 per cent. Exports from Port Pirie principally comprise pig-lead, concentrates and ores (the produce of Broken Hill) and wheat. Shipments of wheat, and to a lesser extent barley, constitute the major part of exports from Port Lincoln, Wallaroo, Ardrossan and Thevenard, while the principal commodity exported from Port Augusta is copper concentrate from the Northern Territory.

The following table shows the value of imports and exports at the principal ports during each of the years 1970-71 to 1974-75.

Value of Overseas Trade: Principal Ports, South Australia

Port	1970-71	1971-72	1972-73	1973-74	1974-75p
		Ім	PORTS (\$'00	0)	
Port Adelaide (a)	171 192	163 532	171 379	270 252	382 742
Port Lincoln	607	1 109	757	1 455	3 398
Port Pirie	991	1 414	2 080	1 037	3 059
Port Stanvac	19 113	20 037	18 100	36 871	84 490
Thevenard	_	_		1	
Wallaroo	460	618	360	979	1 080
Whyalia	5 995	3 039	7 303	3 320	7 309
Total	198 358	189 748	199 978	313 915	482 077

Value of Overseas Trade: Principal Ports, South Australia (continued)

Port	1970-71	1971-72	1972-73	1973-74	1974-75
		Ex	PORTS (\$'00	0)	
Ardrossan		6 332	7 454	14 807	15 751
Port Adelaide (a)	215 066	232 015	356 487	405 920	357 929
Port Augusta	8 377	1 970		1 394	1 940
Port Giles	(c)	1 420	3 172	8 571	5 506
Port Lincoln	29 096	29 012	19 230	42 103	91 230
Port Pirie	76 471	73 299	72 251	98 224	115 587
Port Stanvac	383	520	113	549	1 276
Thevenard	8 630	10 948	11 408	24 193	35 967
Wallaroo	20 380	18 550	9 297	19 763	46 920
Whyalla	24 390	19 998	42 306	47 357	92 304
Total	393 737	394 064	521 720	662 881	764 410

<sup>(</sup>a) Includes 'Parcels Post, Adelaide'; 'Adelaide City (including Adelaide Airport)', Stenhouse Bay and Woomera. (b) Includes Edithburgh. (c) Included with Wallaroo.

# CUSTOMS AND EXCISE DUTY

Excise duty is levied on specific goods of Australian manufacture, principally for the purpose of raising revenue. Although these excise goods do not form a part of overseas trade, the rate of excise duty is in some cases related to the import duty on similar goods. The following table gives details of the value of customs duty and excise duty collected in South Australia during the years 1972-73 to 1974-75.

Customs and Excise: Net Revenue, South Australia

Customs Tariff and Excise Tariff Item	1972-73	1973-74	1974-75
Customs		\$,000	
Live animals; animal products	60	49	43
Vegetable products	56	49	64
Animal and vegetable oils and fats	30	51	15
Spirituous and alcoholic preparations	2 937	4 216	6 181
Tobacco, cigarettes, etc	1 295	957	770
Other	281	370	647
Automotive spirit and other mineral products	3 331	1 782	2 065
Chemicals and products thereof	236	243	248
Plastics, resins, rubber and manufactures thereof	1 397	1 508	2 023
Hides, skins, leather and articles thereof	144	200	213
Wood and wicker	1 509	1 609	1 530
Paper-making material; paper and paper manu-			
factures	496	615	639
Textiles	2 273	2 835	4 494
Footwear, sunshades, whips, artificial flowers, etc	228	268	381
Earthenware, cement, china, etc	599	642	845
jewellery, coin, etc	56	142	198

Customs and Excise: Net Revenue, South Australia (continued)

Customs Tariff and Excise Tariff Item	1972-73	1973-74	1974-75
Customs (continued)		\$'000	
Base metals and articles thereof	1 238	1 409	1 695
Electrical and mechanical machines and machinery	5 406	6 704	12 747
Transport equipment and parts thereof	5 937	8 096	18 315
Optical, surgical and scientific instruments, etc	613	741	838
Arms and ammunition and parts thereof	4	8	25
Miscellaneous manufactured articles	664	750	977
Works of art, antiques, etc	1	3	4
Other customs revenue	318	149	9
Primage	307	150	-14
Total net customs and primage duties	29 414	33 546	54 951
Excise			
Petroleum products	40 692	59 077	61 100
Spirits	5 704	8 550	12 264
Tobacco, cigars and cigarettes	30 953	37 145	44 585
Grape wine for commercial purposes	1 192		
Other	31 506	34 433	36 087
Total net excise duties	110 047	139 205	154 036
Total net customs, primage and excise revenue	139 461	172 751	208 988

# 10.3 PRICES

# MEASUREMENTS OF PRICE MOVEMENTS

The prices of a wide range of commodities and services are recorded at regular intervals by the Australian Statistician for the purpose of compiling various price indexes or for publication of series showing actual price levels.

Price indexes aim to measure the degree of change in price levels, or more specifically the proportionate change in the aggregate price, of specified quantities and qualities of a list of selected items. These indexes measure changes through time and it is traditional for presentation purposes to select a certain year, known as the base year, to equate the average aggregate price (of the list of items) in that year to 100 or some other suitable number, and to adjust other years on a proportionate basis.

When index numbers for different places are compared (e.g. Consumer Price Index, Capital Cities) the only legitimate comparison is the relative change i.e. that prices increased or decreased more in one place than another; even when a common base year is used the actual levels of prices, equated to 100 in each case, may differ substantially from place to place; in addition, selected items, qualities or weights may differ from place to place.

In constructing a price index it is necessary to limit attention to a selected list of items because it would clearly be impossible to determine at regular intervals the price of all items entering into a given field of expenditure (e.g. household expenditure in the case of the Consumer Price Index). The list of items selected must be as representative as possible of the field to be covered and consist of items for which price variations can be ascertained accurately at regular intervals. Each item must be assigned a relative importance (weight) in approximate proportion to actual expenditures on that item within the total field of expenditure being considered. Particular care must be taken to detect, assess, and make allowance for changes in quality of selected items.

Over time it becomes necessary to substitute new grades, qualities or types of articles for those formerly used as indicators of price movements in an effort to keep an index representative of current patterns of expenditure. These substitutions can normally be achieved without invalidating the index. From time to time major changes in the overall pattern of expenditure are noted, and in the past these have prompted the abandonment of an existing index in favour of a different index, the composition and weighting of which were more representative of expenditure at that time.

# RETAIL PRICE INDEXES

A brief historical review of early price indexes was included on page 494 of the South Australian Year Book 1970. Details of movements in the 'C' Series Index from 1901 to 1959 are shown in the Statistical Summary Appendix A.

#### Consumer Price Index

The Consumer Price Index is a quarterly measure of variations in the retail prices of certain goods and services which make up a high proportion of the expenditure of wage-earner households. Rather than a single index, it consists of a chain of eight linked indexes each representing a significant variation in composition and/or weighting. The weighting patterns adopted relate to an estimated aggregate expenditure for all wage-earner households, and not to some estimated expenditure of a single household. In this way it is possible to give representation to certain major expenditures which relate to some households and not others.

The Consumer Price Index was compiled for the first time in 1960, and retrospective calculations have been made dating back to 1948. Significant changes in composition or weighting were introduced at the June quarters of 1952 and 1956, March quarter, 1960 and December quarters of 1963, 1968, 1973 and 1974. For the period covered by the tables below, the principal changes involved were:

- (a) the introduction of services by dentists, doctors, hospitals and health insurance funds (1968), and of snacks and take away food, wines and spirits, photographic goods and services, and records (1973),
- (b) alterations in the proportions of houses under various modes of occupancy (1968 and 1973), and
- (c) changes in the weights of fuel and fares (1968) and of private motoring generally and health services (1973). In addition, the abolition of radio and television licences from 18 September 1974 resulted in a new series (the eighth) deleting this item from the December quarter 1974.

From the December quarter 1973 the weighting of the index has been broadly based on the estimated pattern of consumption in 1971-72.

The wide range of commodities and services in the Consumer Price Index are arranged in five major groups, with index numbers compiled for each of these groups as well as a total for all items. Index numbers for Adelaide for these individual groups and for 'All Groups' are recorded in the next table.

Consumer Price Index, Adelaide(a)

Year	Food	Clothing and Drapery	Housing	Household Supplies	Miscel- laneous	All Groups
1965-66	97.1	97.8	95.7	99.2	95.7	97.0
1966-67	100.0	100-0	100-0	100.0	100.0	100.0
1967-68	104.7	102-2	102-1	100.3	102.6	102.9
1968-69	106.4	104.5	104.7	101-1	107.0	105-3
1969-70	107.1	108-1	109-3	102.0	112.0	108.2
1970-71	109.5	112.6	115.9	105.4	118-1	112.5
1971-72	113.6	119.5	124.4	109.2	128.3	119.2
1972-73	123-1	127-2	133-3	113.0	133.7	126.5
1973-74	148.3	144.2	150.6	121.9	146.5	143.9
1974-75	163.7	173.8	18 <b>5</b> ·3	142.5	178.9	169.7

<sup>(</sup>a) Base year  $1966-67 = 100 \cdot 0$ .

The 'All Groups' index for Adelaide is shown in the following table with that for each of the other capital cities. It is emphasised that these numbers reflect changes in prices within each individual city, but they do not measure differences in the level of prices between cities, and the Consumer Price Index should not be regarded as a 'cost of living' index.

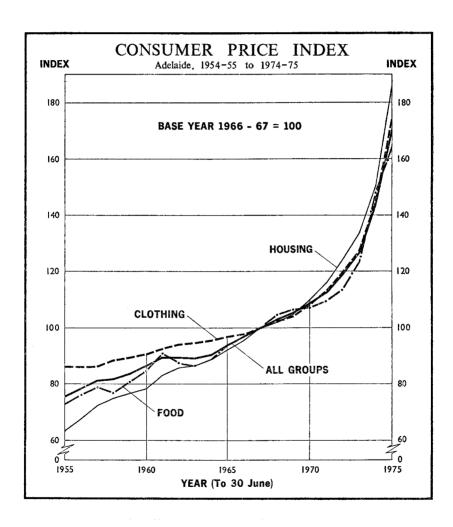
# Consumer Price Index, Adelaide and Other Capital Cities(a)

Year	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Six State Capital Cities	Canberra
1965-66	97.7	97.5	97.5	97.0	96.1	98.0	97.4	98·1
1966-67	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1967-68	103-2	103.7	103.3	102.9	102.9	104.6	103.3	102.6
1968-69	106-2	106.2	105.5	105.3	105.5	106.1	106.0	104.4
1969-70	110.6	108.7	108-4	108.2	109.4	108.5	109.4	107.4
1970-71	116.8	113.1	114.2	112.5	114-1	112.6	114-6	113.0
1971-72	126-3	119.7	121.6	119-2	120.7	119.9	122.4	119.4
1972-73	133-9	127-2	128.6	126.5	127-3	126.7	129.8	126.3
1973-74	151.3	144.0	146.1	143.9	140.6	142.6	146.6	142.8
1974-75	176-1	167-9	168.7	169.7	166-1	166.7	171-1	164-9

<sup>(</sup>a) Base year 1966-67 = 100-0.

The quarterly information discussed above was supplemented in April 1973 by the release of monthly Consumer Price Index numbers for the food group and its component sub-groups for the period March 1972 to March 1973.

Further details and a continuation of the series may be obtained from the bulletin Consumer Price Index: Monthly Food Group Index Numbers (Reference No. 9.11) published by the Australian Statistician.



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#### OTHER PRICE INDEXES

For some time there has been increasing demand for price indexes relating to materials used and articles produced by important defined areas or sectors of the economy. At December 1975 the following indexes had been prepared and published by the Australian Statistician:

Export Price Index,

Wholesale Price Index of Electrical Installation Materials.

Wholesale Price Index of Metallic Materials Used in the Manufacture of Fabricated Metal Products,

Wholesale Price Index of Copper Materials Used in the Manufacture of Electrical Equipment,

Wholesale Price Index of Materials Used in Manufacturing Industry.

In addition a price index of Articles Produced by Manufacturing Industry is being prepared.

# Price Index of Materials Used in House Building

This Index measures changes in prices of selected representative materials used in the construction of houses and is complementary to the Wholesale Price Index of Materials Used in Building other than House Building which was introduced in 1969.

It is a fixed weights index, the composition of which is in accordance with the usage of materials in actual houses which were selected as representative for the purpose. The Index does not purport to represent buildings of any kind other than houses.

In the interests of uniformity and ease of use the reference base of the Index is the year 1966-67 == 100 the same as that used for the Wholesale Price Index of Materials Used in Building other than House Building. However, because of the later time at which the weighting source data were collected, the weighting base approximates more closely the year 1968-69. Each State capital city has a unique weighting pattern which reflects the difference in the estimated relative importance of given items as between cities. The weighting pattern for each capital city is applied to local price measures in calculating indexes for that city.

The price series used relate to specified standards of each commodity and are obtained from suppliers of materials used in house building. The Index includes 50 items in 11 groups combined in an 'All Groups' index, the selection of materials included being based on local usage. Some items carry the weight of similar items not directly priced and all items are described in terms of fixed specifications with the aim of recording price changes for representative materials of constant quality. Prices are collected at or as near as possible to the mid-point of the month to which the Index refers. Figures are published to one decimal place to avoid distortions which would occur in rounding the index numbers to the nearest whole number.

The weighting pattern used in the Index and applicable to Adelaide is shown in the following table.

# Price Index of Materials Used in House Building: Composition and Weighting Pattern, Adelaide Base year: 1966-67

Percentage Contribution of Group to All Groups Index Group % 8.13 Concrete mix, cement and sand ....... 6.98 14.85 Timber, board and joinery .......... 35.52 6.67 7.24 Other metal products .............. 3.42 1.37 Electrical installation materials ......... Installed appliances .............................. 4.20 Plaster and plaster products ......... 4.19 Miscellaneous materials ........... 7.43

The index numbers for separate groups of items and all groups combined for Adelaide and the weighted average index numbers for the six State capital cities are shown in the next table.

# Wholesale Price Index of Materials Used in House Building (Base of each Index: $1966-67 = 100 \cdot 0$ )

Group		Adelaide		Weighted Average Six State Capital Cities			
•	1972-73	1973-74	1974-75	1972-73	1973-74	1974-75	
Concrete, etc.	127-5	132.9	160-9	127.0	137-5	165.7	
Cement products	135.0	157.6	205.0	139.9	154-3	193.1	
Clay bricks, tiles, etc	137.5	143.4	181.4	130.7	146.8	180.3	
Timber, board, etc	142.3	182.9	230.5	137.0	169-1	203.5	
Steel products	136.2	152-3	190.0	136.8	153.8	192-1	
Other metal products	128.8	149.3	170.1	124.9	146.3	170.3	
Plumbing fixtures, etc	135.4	148-4	180.4	129.6	143-2	174.5	
Electrical installation materials	124.4	144.0	163.4	126-2	146-4	168.3	
Installed appliances	112.3	122-4	147-6	108.3	117.7	146.4	
Plaster and plaster products	118.9	126.5	155∙6	118-7	122-2	147-8	
Miscellaneous materials	129-1	143-9	176-4	124.9	135.0	161.5	
All Groups	134.8	157-2	195.4	131-1	151-3	183-4	

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The 'All Groups' Index for Adelaide is shown in the following table with that for each of the other State capitals. It is emphasised that these numbers reflect price changes within each individual city and that they do not measure differences in the level of prices between cities.

# Wholesale Price Index of Materials Used in House Building All Groups, State Capital Cities

(Base of each Index:  $1966-67 = 100 \cdot 0$ )

Period	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Weighted Average Six State Capital Cities
Year:							
1970-71	119.8	112.3	115.2	116.7	113.9	114.3	115.7
1971-72	126.1	118-9	124.8	124.8	121-1	120.7	122.7
1972-73	135-6	126.5	133.8	134.8	126.9	130.8	131-1
1973-74	158.0	147.8	152-2	157-2	141.8	145-5	151-3
1974-75	189-4	178.4	187.0	195-4	172-4	179-1	183-4

# Price Index of Materials Used in Building Other than House Building

This Index measures changes in prices of selected materials used in the construction of buildings other than houses and low-rise flats. It is a fixed-weights index, the composition of which is in accordance with the materials usage in building projects selected as representative for the purpose: such usage was derived from reported values of each material used in selected representative buildings constructed in or about 1966-67.

The building types directly represented include high-rise flats (generally those exceeding three storeys), offices, factories, health buildings, education buildings and other commercial premises.

The price series used relate to specified standards of each commodity and are obtained in all State capital cities from representative suppliers of materials used in building. Prices are collected at or as near as possible to the mid-point of the month to which the index refers. Items are described in terms of fixed specifications with the aim of recording price changes for representative materials of constant quality. Figures are published to one decimal place to avoid distortions which would occur in rounding the index numbers to the nearest whole number.

The Index includes 72 items combined in 11 groups in an 'All Groups' index. The weighting pattern used in the index is shown below. In calculating indexes for each State capital city a single weighting pattern for the whole of Australia is applied to price measures obtained, with a few minor exceptions, in each relevant city.

# Price Index of Materials Used in Building Other than House Building Composition and Weighting Pattern

Base Year: 1966-67

	Percentage Contribution of Group to All Groups
Group	Index
	%
Concrete mix, cement, sand, etc	10-41
Cement products	3.64
Bricks, stone, etc	5.28
Timber, board and joinery	
Steel and iron products	
Aluminium products	
Other metal products	
Plumbing fixtures	
Miscellaneous materials	7.09
Electrical installation materials	
Mechanical services components	

The next table shows, for separate groups of items and all groups combined, the index numbers for Adelaide and the weighted average index numbers for the six State capital cities.

Wholesale Price Index of Materials Used in Building Other than House Building (Base of each Index:  $1966-67 = 100 \cdot 0$ )

Group		Adelaide			Weighted Average Six State Capital Cities (a)			
	1972-73	1973-74	1974-75	1972-73	1973-74	1974-75		
Concrete, etc	127-2	131-0	156-1	124-5	136.0	164-6		
Cement products	137.8	151.8	194·4	135.0	147.7	183-9		
Bricks, stone, etc	140.3	149-2	191.4	130-1	146-3	179•4		
Timber, joinery, etc	133-9	165.7	212-4	132.9	160·2	194.7		
Steel and iron products	130.6	147-6	187.5	130.3	148.8	189.2		
Aluminium products	121-1	136-5	163.7	125.4	138-4	169∙2		
Other metal products	127-1	156-4	160∙6	126.4	158-5	162.7		
Plumbing fixtures	145.5	161-4	204.6	143.5	159∙6	197.7		
Miscellaneous materials	123.7	134.9	168-6	124.5	134.2	163.4		
Electrical installation materials	120.5	138-3	157-4	120.5	138.3	157-4		
Mechanical services components	132.3	143.7	181-6	132-4	143.9	181.3		
Special purpose index $(b)$	130.4	146.9	183.5	129.3	147.0	181-3		
All Groups	129-8	145.8	181-0	128-9	145-8	179-2		

<sup>(</sup>a) See previous table for weighting pattern.

The 'All Groups' index for Adelaide is shown in the following table with that for each of the other State capital cities. It is emphasised that these numbers

<sup>(</sup>b) All groups excluding electrical installation materials and mechanical services components.

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reflect price changes within each individual city, but they do not measure differences in the level of prices between cities.

# Wholesale Price Index of Materials Used in Building Other than House Building All Groups, State Capital Cities

(Base of each Index:  $1966-67 = 100 \cdot 0$ )

Period	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Weighted Average Six State Capital Cities
Year: 1970-71 1971-72 1972-73 1973-74 1974-75	122·4 127·2 144·1	115·1 123·9 131·2 148·0 180·6	116·4 124·4 130·4 149·0 186·6	113·9 122·7 129·8 145·8 181·0	113·3 121·3 126·3 142·9 176·7	115·0 122·6 129·7 143·8 179·3	115·5 123·0 128·9 145·8 179·2

# COMMODITY PRICES

# Retail Prices of Food

The next table shows the average retail prices of selected food items in Adelaide during recent years. Items included are those which are considered identical or sufficiently comparable from place to place to warrant publication of comparative prices.

# Average Retail Prices of Selected Food Items, Adelaide

Item	Unit	1971	1972	1973	1974	1975
Bread (a) Self-raising flour Tea Rice Peaches, canned Potatoes Onions Butter, factory Cheese, processed Eggs (b) Milk; fresh, bottled (a) Bacon, rashers Sausages Beef: Rib (without bone)	900 g 1 kg 227 g 500 g 822 g 3·2 kg 454 g 500 g 227 g doz. 6600 ml 227 g 454 g	20·4 18·6 30·1 16·3 30·4 42·7 12·1 59·0 24·0 60·2 10·9 48·4 28·9	22·3 20·0 31·9 17·0 30·6 41·4 11·6 60·7 27·7 55·8 11·6 50·0 28·8	Cents 25-0 21-8 30-2 18-5 31-7 75-8 60-5 29-1 66-6 12-0 56-0 39-5	31·2 24·9 31·1 21·1 40·3 108·1 17·4 63·9 31·9 80·7 14·1 72·7 48·8	38·8 29·5 40·4 24·9 47·4 61·9 16·1 73·1 40·1 88·7 17·0 83·9 44·5
Rump steak	454 g 454 g	109·7 68·4	114·0 70·7	135·9 85·9	138·1 89·4	121·1 78·8

Average Retail Prices of Selected Food Items, Adelaide (continued)

Item	Unit	1971	1972	1973	1974	1975
				Cents		
Lamb:						
Leg	454 g	44·6 39·4 49·5	47·3 43·3 52·2	65·2 66·8 76·6	78·9 79·2 87·2	80·6 78·1 90·0
Pork:						
Leg		70·2 70·6	70·1 69·7	77·3 78·3	106·8 109·0	125·1 125·9

<sup>(</sup>a) Delivered. (b) 55 gram eggs.

A comparison of the prices of various food items in Adelaide with the prices of those same items in the other capital cities is given in the following table.

Average Retail Prices of Selected Food Items, Australian Capital Cities
December 1975

Item	Unit	Sydney	Mel- bourne	Brisbane	Adelaide	Perth	Hobart	Canberra
				Cer	nts			
Bread (a)	900 g	44.0	42.2	37-4	40.0	38-0	(b) 44·0	43.0
Self-raising flour	1 kg	38.4	38-0	31.3	31.7	39.9	40.5	41.6
Breakfast cereal, corn based	500 g	53.7	54.9	55.3	54.9	67.1	61.5	54.9
Biscuits, dry	226 g	33.3	35.6	30.9	33.0	34.1	37.2	33.4
Геа	227 g	42.8	40.7	41.0	38.8	41.4	45.7	44.8
Rice	500 g	25.0	27.5	27.5	26.6	27.1	28.3	26.0
Jam, apricot	680 g	50.8	52.9	53.3	50.6	58.0	56.7	49.2
Peaches, canned	822 g	47.7	53.0	57.8	50.7	56.8	58.6	50.5
	3.2 kg	89-5	75.2	80.2	70·1	90.4	78.9	100-5
Onions	454 g	19.5	21.9	15.8	18.1	19.8	19.2	23.1
Butter, factory	454 g	76.2	71·2	74.4	73·6	73.5	77.2	80.4
Cheese, processed	250 g	43.8	44.2	46.1	43.5	42.9	46.0	43.7
Margarine, table, poly-unsatu-	230 g	73.0	77 2	40 1	455	727	-10 0	
rated	454 ⊈	71.3	70.9	69.7	68.6	71.3	69.3	70.9
Eggs (c)	doz	91.8	93.9	90.9	93.6	99.2	98.6	87·7
	600 m <i>I</i>	21.5	17.9	20.1	18.0	19.0	17.0	19.0
Bacon, rashers, pre-packed	250 g	93.7	110.4	94.0	94.0	82.4	103.3	98.8
	454 g	42 4	45.0	44.1	45.8	38.8	50.5	49.0
Sausages		69.3	72.5	72.4	69.7	72.1	79.8	68.9
	220 g 300 m <i>l</i>	34.4		36.3	33.2	38.8	38.3	38.1
			33.7	29.5	28.1	30.0	31.9	31.9
Spaghetti (in tomato sauce)	454 g	28.4	30.2					
Prepared baby food	127 g	14.3	14.1	15.1	14.4	16.3	15.6	15.2
Beef:	454	00.3	CO. 4	<b>50.0</b>	<b>55.0</b>	E0. 1	65.3	76.2
Rib (without bone)	454 g	80.3	68-1	70.8	77.8	59.1		
Rump steak	454 g	135-9	122-2	113.1	124.7	117.4	137.9	167.7
Corned silverside	454 g	81.7	75.3	76.9	83.6	73.5	86∙3	82.8
Lamb:					~~ ~	~- ~	<b>50.0</b>	00.4
	454 g	80.6	64.0	88.4	78.8	87.2	79.9	88.4
Loin chops	454 g	80.0	70.2	90∙6	85.7	86.5	80.4	97-1
Forequarter chops	454 g	60-1	54.7	90∙6	74-0	74.5	70-5	73.2
Pork:								
Leg	454 g	129-2	120-1	116.7	138-2	122.4	135.9	125.5
Chops	454 g	113-1	125.0	120-1	137.8	115.0	127.7	120-5

<sup>(</sup>a) Delivered. (b) Wrapped. (c) 55 gram eggs.

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# Other Commodity Prices

South Australian prices of agricultural products are shown in the table on page 444, and separate details of wheat, barley, wool and livestock are given under the appropriate headings in Part 9.1.

#### PRICE CONTROL

Following the outbreak of the 1939-45 War the Australian Government, acting under the authority of the National Security Act, established price control in Australia. A Commonwealth Prices Commissioner was appointed and given extensive powers in the regulation of prices. The National Security Act expired at the end of 1946 but temporary legislation provided for the continuation of price control until the end of 1948.

During 1948 the Australian Government held a referendum seeking authority for permanent control over prices and rents. However, the proposal was rejected and the States agreed to assume responsibility for price control. In South Australia the necessary administrative structure was established by the Prices Act of 1948. Provision was made for the retention of existing Australian Government price regulation orders altered in accordance with the State Act.

Under the provisions of the Prices Act, 1948-1975 the South Australian Prices and Consumer Affairs Branch determines maximum prices for controlled goods and services and investigates complaints concerning excessive prices for goods and charges for services whether subject to price control or not. Special investigations are carried out on behalf of the Government by the Branch which is responsible also for many aspects of consumer protection which are discussed in more detail on pages 187-9.

The Australian Government held a further referendum in December 1973 seeking power to control the level of prices and incomes, but, as was the case in 1948, the proposal was rejected.

#### RENT CONTROL

Rent control was introduced in South Australia at the beginning of the 1939-45 War, with the passing of the Increase in Rent (War Restrictions) Act, 1939, which pegged rents at the level prevailing at 1 September 1939. In 1942 this Act was replaced by the Landlord and Tenant (Control of Rents) Act. Although providing the same benchmark, this Act allowed the South Australian Housing Trust to determine a variation in rent, upon application by either the landlord or tenant, or in certain cases on its own initiative. An appeal against such a determination could be made to a Local Court. From the beginning of 1943 to the end of 1962, 60 180 applications for rent determinations were dealt with by the Trust, of which 29 were varied by a Local Court.

Following an inquiry held in 1951 on the future of rent control, proportionate loadings were introduced to allow for increases in property costs since 1939. The gradual relaxation of rent control was achieved through periodic extensions of these loadings and through the exclusion of long-term leases from the provisions of the Act.

At the end of 1962 the Landlord and Tenant (Control of Rents) Act was replaced by the Excessive Rents Act, which currently provides that the tenant of any premises, except where a lease of two years or more exists, may apply to a Local Court to determine whether the rent is excessive.

#### **Sub-Standard Housing**

To regulate the rents for sub-standard housing the Housing Improvement Act, 1940-1973 vests in the South Australian Housing Trust power to declare a house sub-standard, and fix a maximum rent on it for such time as the declaration remains in force.

The Act provides that before the Trust declares any house to be sub-standard, it must notify the owner of its intention to do so and then allow a period of time for the necessary improvements to be made. If the house is subsequently found to remain in a sub-standard condition, a maximum rent fixation is made and then strictly controlled for such time as the house remains in a sub-standard classification.

In 1974-75 the Trust inspected 2 291 houses, commenced proceedings under the Housing Improvement Act on 723 of these properties, and fixed maximum rents on 436 houses.

# 10.4 TRANSPORT

A network of sea, rail, road and air services has been established between South Australia and the other States of Australia. Transport between the eastern States and Western Australia, and to a lesser extent Northern Territory, is made via South Australian services. Distances between Adelaide and other Australian capital cities, and Darwin, are shown in the following table.

# Distances Between Adelaide and Other Capital Cities

Method of Canberra Travel	Sydney	Melbourne	Brisbane	e Perth	Hobart	Darwin
		Kilo	netres			
Road (a) 1 207	1 434	745	2 140	2 740		3 223
Rail 1619	1 654	777	2 641	2 654		
Air 988	1 196	660	1 967	2 2 1 6	1 283	2 766
		Nautic	al Miles			
Sea	965	515	1 480	(b) 1 378	772 (	c)3180

- (a) In some cases shorter but less popular routes are available.
- (b) Fremantle. (c) Via Fremantle.

#### TRANSPORT CONTROL AND OPERATIONS

# STATE TRANSPORT AUTHORITY

The State Transport Authority was constituted under the State Transport Authority Act, 1974, which became operative on 18 April 1974. The Authority consists of seven members including a full-time Chairman. The concept under-

lying the establishment of the Authority is that all passenger public transport services throughout the State should be under the control of a single Authority.

The State Transport Authority Act, 1974 vested in the Authority, power to co-ordinate all systems of public transport and powers of direction in respect of the South Australian Railways Commissioner, the Municipal Tramways Trust and the Transport Control Board. Provisions of the Act also required the Authority to recommend to the Minister the manner and means by which the Authority could assume and exercise the powers and functions of the above authorities.

The State Transport Authority Act Amendment Act was passed in November 1975, and provides for the dissolution of the statutory entity of the three authorities, and the assumption of their powers and functions by the State Transport Authority. The Act was proclaimed into force on 8 December 1975 at which time the functions of the Transport Control Board, South Australian Railways Commissioner and the Municipal Tramways Trust were assumed by the Authority.

#### ROAD PASSENGER TRANSPORT CONTROL

The Transport Control Board, constituted under the Road and Railway Transport Act, 1930-1971, was concerned with the regulation and rationalisation of passenger transport services and in particular the co-ordination of road and railway passenger services. These powers have now been assumed by the State Transport Authority.

The Authority has power to declare roads outside a radius of 16 kilometres from the General Post Office, Adelaide to be controlled routes. Licences issued by the Authority specify the route or routes over which the licensee is permitted to operate vehicles; licences have a currency of seven years but many special permits are issued for periods up to twelve months.

At 30 June 1975 current licences totalled thirty-five. Special annual permits included 139 charter coach, 143 hire car and 125 miscellaneous passenger permits while special permits for short periods issued during the year covered 4 578 passenger vehicles. The Authority also registers persons and firms who book passengers on behalf of a licensee; at 30 June 1975 there were 129 such agents.

### **RAILWAYS**

In Part 8.4, railways in South Australia were discussed under the headings of ownership and control, and standardisation of railway gauges. It was mentioned that both the South Australian and Australian Governments operate railways in this State and that there are two privately-owned railways, from Iron Knob and Iron Baron to Whyalla, and from Coffin Bay to Port Lincoln; this section deals with the operation of the South Australian Railways as a means of transport within and to and from the State. Details are not available on the operations of the private railways.

# Transfer of Non-Metropolitan Railways

Agreement has been reached between the Australian and South Australian Governments to transfer a portion of the State railway system to the Australian National Railways Commission. The railways to be transferred are generally those outside the Adelaide Metropolitan Area, however some facilities (principally freight yards and workshops) within the Adelaide Metropolitan Area are also to be transferred.

The transfer agreement provides for trains operated by the State and National systems respectively, to operate as may be necessary on lines of the other system by a 'running rights' agreement, and the two Governments have acknowledged a long-term goal of physical separation of the two systems in the Metropolitan Area.

The transfer agreement also provides a number of safeguards aimed at ensuring that rail services throughout the State are maintained generally at a level acceptable to the State Government.

#### SOUTH AUSTRALIAN RAILWAYS

# Financial Summary

Capital indebtedness (see definition on page 614) of the South Australian Railways at 30 June 1975 totalled \$159 428 000. Operations for 1974-75 resulted in a deficit of \$41 758 000 and after taking into account contributions from Consolidated Revenue totalling \$40 000 000, there was a deficit of \$1 758 000. The following summary shows details of capital indebtedness, working expenses, and revenue for the four years to 1974-75.

# South Australian Railways: Capital Indebtedness, Working Expenses and Revenue

Particulars	1971-72	1972-73	1973-74	1974-75
		\$'00	00	
Capital indebtedness	157 474	156 010	156 977	159 428
Working expenses	46 801 35 603	52 621 35 332	61 134 39 827	80 980 48 315
Deficit on operating	11 197 8 280	17 289 8 595	21 307 8 679	32 665 9 092
Total deficit for year	19 477	25 884	29 986	41 758
dated Revenue		22 500	30 000	40 000
Net surplus (+) or deficit (-)	+23	-3 384	+14	-1 758

# **Working Expenses**

The cost of operating the South Australian Railways during 1974-75 was \$80 980 000 plus debt charges which amounted to \$9 092 000. The working

expenses include the cost of administration, maintenance of permanent way, rollingstock maintenance and operation costs, salaries and wages of station staff, guards and conductors. A comparison of working expenses for the four years to 1974-75 is given in the following table.

South Australian Railways, Working Expenses

Expenses	1971-72	1972-73	1973-74	1974-75
Administration:		\$'0	00	
Salaries, wages, expenses, etc	1 668	1 929	2 308	2 888
Payroll tax Superannuation Act—Pensions	93 1 596	1 735	1 899	2 559 2 824
Way and works:				
Maintenance and superintendence of permanent way, etc	11 181	13 068	13 948	17 324
Rollingstock:				
General superintendence	360	367	444	568
Maintenance of rollingstock	7 309 6 249	7 779 6 856	8 <b>515</b> 8 696	11 347 11 300
Transportation and traffic:				
General superintendence, station staff, guards, etc	13 483	15 163	18 807	24 424
Miscellaneous:	10 100	15 105	10 007	
Refreshment services, road motors, etc	1 760	1 975	2 420	3 099
Stores:				
Salaries, wages, expenses	903	1 026	1 230	1 582
Depreciation (a)	2 200	2 723	2 867	3 065
Total	46 801	52 621	61 134	80 980

<sup>(</sup>a) Additional depreciation is included in 'Maintenance of rollingstock' and other accounts to cover depreciation of workshop machinery. The amount for 1974-75 was \$126 480.

The average number of persons employed in operations and maintenance during 1974-75 was 7 575. In addition an average of 697 persons were employed on special work including standardisation programs.

# **Debt Charges**

These charges to the South Australian Railways have increased over the five-year period 1970-71 to 1974-75 because of the additional loan funds made available for capital purposes and higher interest rates. Net funds provided from State Loan Fund were \$143 040 000 at 30 June 1975 as against \$134 531 000 at 30 June 1970.

The net amount on which the State was liable for interest and repayment under Railways Standardisation Agreements at 30 June 1975 was \$15 307 000 compared with \$15 945 000 at 30 June 1970. The total expenditure on

standardisation to 30 June 1975 was \$64 336 000, of which \$62 435 000 was provided by the Australian Government (30 per cent repayable by the State), and \$1 901 000 was contributed from the Consolidated Revenue of the State. Outstanding liability of the State to the Australian Government under the Railway Equipment Agreement at 30 June 1975 amounted to \$601 000.

Debt charges for 1974-75 were:	\$
Interest on Loan Funds provided for capital purposes (other than stores) including exchange on overseas debt	7 840 209
Interest on Loan Funds invested in stores	302 944
Interest under Railways Standardisation and Railway Equipment Agreements	921 234
Interest on Railways of Australia rollingstock	27 855
	9 092 242

#### Sources of Revenue

For the five-year period ending 30 June 1975 approximately 75 per cent of railways operational revenue was derived from carriage of freight and about 14 per cent from passenger traffic. Sources of revenue and the amounts received for the years 1970-71 to 1974-75 are shown in the table below.

# South Australian Railways, Sources of Revenue

Source	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Country passengers	1 837	1 944	2 026	2 550	2 902
Suburban passengers	2 055	2 152	2 285	2 417	2 736
Parcels, mails, etc	912	815	774	836	1 018
General merchandise and		•			
miscellaneous freight	13 691	13 599	15 074	17 226	18 455
Wool	138	134	137	146	186
Wheat	4 134	3 365	2 419	3 546	5 596
Barley and other grains	909	1 963	584	1 136	2 224
Livestock	1 016	951	1 063	1 013	1 284
Minerals	7 221	7 537	7 106	6 751	8 389
Rents and miscellaneous	1 467	1 765	2 353	2 398	3 324
Catering and trading					
services	1 255	1 378	1 510	1 809	2 201
Total	34 635	35 603	35 332	39 827	48 315

Revenue from road motor services, amounting to \$364 000 in 1974-75, is included in the preceding table with revenue from passengers, parcels, mails, etc. and miscellaneous freight.

# Railway Operations

# Train Kilometres Run and Track Open

The average length of track open for traffic during 1974-75 was 3 888 kilometres (including 47 kilometres in New South Wales between Cockburn and Broken Hill). The last lines closed were the Eudunda-Morgan (56 kilometres) and the Sandergrove-Milang (13 kilometres) in 1969-70, and the Wanbi-Yinkanie (50 kilometres) in 1970-71, while the last line opened was a 3·7 kilometre extension from Lonsdale to Christie Downs in January 1976. Train kilometres run during 1974-75 totalled 10 189 002.

The following table shows revenue and working expenses for the five years to 1974-75.

South Australian Railways, Revenue and Working Expenses	South	Australian	Railways,	Revenue a	and Worki	ng Expenses
---	-------	------------	-----------	-----------	-----------	-------------

Year	Revenue	Working Expenses	Percentage of Working Train Expenses Kilomes to Revenue Run			Working Expenses per Train Kilometre	
	\$'000	\$'000	Per cent	'000 km	\$	\$	
1970-71	34 635	43 002	124	10 210	3.39	4.21	
1971-72	35 603	46 801	131	10 018	3.55	4.67	
1972-73	35 332	52 621	149	10 024	3.52	5.25	
1973-74	39 827	61 134	153	10 313	3.86	5.93	
1974-75	48 315	80 980	168	10 189	4.74	7.95	

Train kilometres run was 10.9 million in 1942-43 but fell to 9.7 million in 1946-47. By 1952-53 train kilometres run had risen to 11.6 million but in recent years it has been at a lower level. In general both revenue and working expenses per train kilometre have increased in recent years with working expenses per train kilometre showing the more rapid increase.

# Locomotives and Rollingstock

Significant steps in the development of traction in the South Australian Railways have been the introduction, particularly in the early 1920s, of more powerful steam locomotives; the introduction of petrol-driven railcars from 1924 and their conversion to diesel operation from 1937; the change from steam to mainline diesel electric locomotives commencing in 1951; and the introduction of improved diesel railcars from 1955. The extent of the change from steam to diesel electric locomotives and from petrol to diesel railcars since 1955 is revealed in the following table.

South Australian Railways, Locomotives and Rollingstock
(At 30 June in selected years)

Particulars	1955	1960	1965	1970	1975
			Number		
Locomotives: Steam Diesel electric:	365	225	151	4	4
Main line	} 12	$\left\{\begin{array}{c} 30\\12\\10\end{array}\right.$	41 21 35	54 46 45	60 46 45
Total	377	277	248	149	155
Rail cars: Power; Diesel	53	118 4	134	124	125
Non-power; Control-equipped Trailer Coaches Interstate coaches Goods and livestock wagons	28 485 54 8 895	7 52 353 61 8 000	7 58 243 71 7 962	7 40 170 65 7 694	7 37 95 90 7 246
Service wagons and vans	478	467	526	622	589

The South Australian Railways use a great variety of specialised rollingstock, most of which is built at its Islington Workshops.

Consumption of locomotive and rail car fuels during the years ended 30 June 1955, 1960, 1965, 1970 and 1975 was as follows.

South Australian Railways, Locomotive Fuel Consumption (Year ended 30 June in selected years)

Fuel	1955	1960	1965	1970	1975
			Tonnes		
Steam locomotives:					
Coal	203 076	80 127	20 739	1 935	132
Heavy oil		29 510	4 356	2 933	27
Diesel locomotives:					
Diesel oil	5 028	12 273	20 971	26 546	29 761
Rail cars:					
Petrol	640	257			
Diesel oil	827	8 306	8 665	8 444	8 268

# Passenger Traffic

The number of passengers carried in 1942-43 was nearly 31 million persons, a substantial increase on the 17.6 million in 1939-40. Following a decline in the immediate post-war period, the number in 1949-50 settled at about the pre-war level, but since 1959-60, has declined to less than 13 million reflecting mainly the trend in suburban passenger traffic. Country passenger traffic has been generally declining since 1944-45.

#### TRANSPORT

# South Australian Railways, Passenger Journeys and Passenger Train Kilometres Run

Year	No. of Pa Carr		Kilometres Run Each			ometres senger ed	Average Earnings per Passenger Kilometre	
	Country (a)	Suburban	Country (a)	Suburban	Country (a)	Suburban	Country (a)	Suburban
1970-71 1971-72 1972-73 1973-74 1974-75	515 564 683	'000 12 946 12 289 12 756 12 914 11 997	'000 2 039 1 967 1 981 2 017 1 993	'000 3 376 3 322 3 378 3 393 3 412	No. 266·89 254·39 247·71 253·42 247·93	No. 12·75 12·54 12·78 12·70 13·25	Cents 1·24 1·49 1·45 1·47 1·67	Cents 1·21 1·33 1·40 1·47 1·72

(a) Includes all interstate passengers.

Interstate passenger and freight services are operated in conjunction with interstate railways including the Australian National Railways—the Victorian Railways to Melbourne, Australian National and Western Australian Railways to Perth, the New South Wales Railways to Sydney and Brisbane, and the Australian National Railways to Alice Springs. Sleeping accommodation and first and second class travel are available for interstate journeys.

From 1 February 1975, suburban passenger fares were increased by 13 per cent and from 1 February 1976, inter-system passenger fares were also increased by about 25 per cent. Country passenger fares were increased from 1 December 1975, the average level of increases being 7.5 per cent.

The table below shows adult single railway fares, in force from 1 February 1976, between Adelaide and selected cities.

# Passenger Railway Fares, Adelaide to Selected Australian Cities

	Adelaide to							Adult, Single Fare (a)			
	Adelaide to -				Economy Class	First Class					
			• • • •					 		\$	\$
Brisbane								 	 	70.00	106.00
Broken Hill										8.30	10.30
Canberra										40.06	58-15
~										20.00	30.00
Perth										(b) 100·00	(b) 137·00
										45.00	68.00

<sup>(</sup>a) Includes booking fee.

# Freight Traffic

The railways by-law rate structure was determined by the need to develop the country and this led to the practice of charging what the traffic would bear—charges were higher for expensive commodities than for cheap ones. This type

<sup>(</sup>b) Includes reserved seats, sleeping berths (where provided) and meals.

of rate helped to subsidise those people who lived in sparsely populated areas which were served by developmental railways. In the past, losses from these services were recouped by charging higher rates on those lines which carried the greater volume of freight. To meet increased competition from road transport in recent years it has been necessary to introduce special freight rates on some lines. The most recent general increase in intrastate freight rates was announced in December 1975.

From 1 July 1968 a uniform classification of rates and conditions for the movement of inter-system goods traffic was adopted by the Australian National Railways and all State Railway authorities. However, some traffic on intersystem lines has been excluded from the application of the uniform rates; such exclusions affecting South Australia relate to traffic between railway stations within South Australia; between South Australian Railways stations and Central Australian Railways and Trans-Australian Railways stations. In these cases a combination of local, special or district and inter-system rates applies.

The next table shows the freight tonnages carried by the South Australian Railways for the years 1970-71 to 1974-75.

South Australian Railways, Freight Carried

Freight	1970-71	1971-72	1972-73	1973-74	1974-75
		'(	000 tonn	es	
Wool Wheat Barley Livestock Minerals General merchandise Total	23 1 076 222 161 1 650 2 989	22 793 443 139 1 790 2 856	25 564 142 149 1 676 3 263 5 820	27 775 242 141 1 806 3 664	32 1 008 410 160 1 934 3 239 6 783
Goods and livestock train kilometres  Average earnings per tonne-kilometre	4 794 1·68	'00 4 730	00 kilome 4 666 Cents 1.66	tres 4 903	4 783 2·06

The tonnages of freight carried during 1974-75 were 1.9 per cent above the level of the previous year. The main increases were recorded in grain and minerals traffic. During 1974-75 a total of 395 000 tonnes of general goods was carried in 'overseas containers', mainly between Melbourne and Adelaide, representing an increase of 7.3 per cent over the previous year.

#### **Accident Casualties**

The table below shows casualties, other than railway employees, as recorded by the South Australian Railways for the years 1970-71 to 1974-75.

South	Australian	Railwaye	Accident	Cagnalties
SUULI	Austranan	nauways.	Accident	Casualites

Persons	1970-71	1971-72	1972-73	1973-74	1974-75
Killed	14	7	11	14	17
	111	144	171	150	231

# TRAMWAY AND BUS SERVICES

The Municipal Tramways Trust was incorporated by Act of Parliament in 1906. The Trust's activities were regulated by the Municipal Tramways Trust Act, 1935-1973. The exclusive powers given to the Trust were assumed by the State Transport Authority under revisions to the Act which has been retitled Bus and Tramway Act, 1935-1975. The MTT is now the Bus and Tram Division of the State Transport Authority (STA).

Under the Act the State Treasurer is empowered to make grants to the Authority to enable it to meet the expenses incurred in the exercise of its functions. In March 1974, the Municipal Tramways Trust acquired the assets and liabilities of most of the licensed private bus operators in the metropolitan area. This is reflected in the details for 1973-74 and 1974-75 in the tables which follow.

#### Historical Survey

A brief historical summary of tramways and omnibus services was included on pages 512-4 of the South Australian Year Book 1970 under the headings 'Historical Survey' and 'Route Miles, Mileage Run and Passengers Carried'.

Main developments during the last twenty years have been the replacement of trams with diesel buses (with the exception of Glenelg tram service which runs mainly on enclosed land), the abandonment of electricity generation in favour of purchasing electric power from the Electricity Trust, the erection of new workshops and new parking and servicing depots.

### Recent Developments

Several new initiatives affecting the metropolitan bus and tram services were taken during 1974-75. They included purchase of approximately 6 hectares of land and development of plans for a new regional bus depot at Morphettville; placing of an order for 310 Volvo bus chassis; letting of contracts for the construction of bodies on the AEC Swift bus chassis ordered during 1973-74 and on the Volvo bus chassis; continuation of the program for the refurbishing and restoration of tramcars; erection of 120 new passenger shelters at bus stops; and preparation of plans for the integration of the former private bus services with other Authority services and for the future development of metropolitan public transport services.

In December 1973, a free bus service, the 'Bee-Line' Service was introduced and operates within city limits to improve distribution from existing transport terminals.

# Income and Expenditure

A table showing capital indebtedness, income and working expenses etc. for the last five years is given in Part 11.4 Public Finance—Public Corporations. Selected details for the five years to 1974-75 are shown in the following table.

State Transport Authority: Bus and Tram Division, Income and Expenditure

Year	Traffic Receipts	Sundry Receipts	Govern- ment Grants	Working Expenses	Interest on Loans	Net Deficit
			\$'(	000		
1970-71	6 640	241	480	6 986	356	20
1971-72	6 783	195	630	7 282	340	14
1972-73	7 036	269	1 330	8 269	406	41
1973-74 (a)	9 615	343	2 250	11 735	469	4
1974-75		716	5 900	18 951	874	(b)—10

<sup>(</sup>a) Not comparable with previous years: includes details of licensed private services taken over in March 1974.

At 30 June 1975 loan indebtedness amounted to \$16219000; these loans are secured by debentures issued to the Treasurer of South Australia.

# Working Expenses

Working expenses of the Municipal Tramways Trust were \$1 244 000 in 1940-41 and had nearly doubled by 1946-47 when they were \$2 402 000. In 1974-75 working expenses reached a record high level of \$18 951 000. Details for the last five years are given in the following table. The average number of persons employed by the Bus and Tram Division during 1974-75 was 1 569 (223 salaried and 1 346 wages staff): salaries and wages paid amounted to \$13 303 000 or over 70 per cent of total working expenses.

State Transport Authority: Bus and Tram Division, Working Expenses

Working Expense	1970-71	1971-72	1972-73	1973-74 (a)	1974-75
Traffic operations Maintenance Power for traffic Fuel and oil for traffic Highways contribution Depreciation Other expenses	3 954 1 159 30 301 87 378 1 077	4 094 1 227 31 349 86 485 1 009	\$'000 4 441 1 485 31 379 123 676 1 135	6 398 1 903 37 630 171 862 1 734	10 759 3 103 40 1 036 274 1 146 2 593
Total  Working expenses per traffic kilometre	6 986 40·19	7 282 42·00	8 269 Cents 47·33	11 735 52·22	18 951 60·17

<sup>(</sup>a) Not comparable with previous years: includes details of licensed private services taken over in March 1974.

<sup>(</sup>b) After receipt of Australian Government grant of \$488 000.

# Route Length, Kilometres Run, Passengers Carried and Fares

The following two tables show the details of route length, kilometres run and passengers carried for the years 1970-71 to 1974-75. The details for electric trams refer to the Adelaide-Glenelg service, the only remaining tram service in this State.

State Transport Authority: Bus and Tram Division, Route Length and Traffic Kilometres

	Route Le	ngth at En	d of Year	Kilometres Run During Year			
Year	Electric Trams	Motor Buses	Total	Electric Trams	Motor Buses	Total	
		Kilometres	<del>, , , , , , , , , , , , , , , , , , , </del>		<b>'</b> 000		
1970-71	11	263	274	669	16 712	17 381	
1971-72		264	275	673	16 663	17 336	
1972-73	11	268	279	676	16 794	17 470	
1973-74 (a)	11	719	730	673	21 799	22 471	
1974-75	11	754	765	676	30 819	31 495	

<sup>(</sup>a) Not comparable with previous years: includes details of licensed private services taken over in March 1974.

State Transport Authority: Bus and Tram Division, Passengers, Traffic Kilometres and Revenue

Year	Passengers Carried	Traffic Revenue	Traffic Kilometres	Average Fare	Traffic Revenue per Traffic Kilometre	
	'000	\$'000	'000	Cents	Cents	
1970-71	41 259	6 640	17 381	15.82	38-20	
1971-72	40 842	6 783	17 336	16.33	39-13	
1972-73	. 41 680	7 036	17 470	16.61	41.81	
1973-74 (a)	47 533	9 615	22 471	20.12	44.31	
1974-75	58 298	12 711	31 495	21.29	42.63	

<sup>(</sup>a) Not comparable with previous years: includes details of licensed private services taken over in March 1974.

A transfer ticket, costing 40 cents, enables a passenger to transfer on two routes in the same direction at a cheaper rate than paying a separate fare for each route. A periodical ticket is available on a weekly basis at a cost of 10 times the normal cash fare for the number of sections travelled; these tickets entitle the holder to unlimited travel over the route and sections specified on the pass seven days a week.

The table below shows passenger fares, from 1 February 1975, for travel over various distances measured in sections; in most cases a section is a distance of approximately 1.5 kilometres.

State Transport Authority: Bus and Tram Division, Passenger Fares

Distance Measured	Adult	Child	Pensioner	Monthly Concession Tickets	
in Sections	Cash Fare	Cash Fare	Cash Fare	School Students	Tertiary Students
		Cents			5
<b></b>	10	5	- 5	1.50	
2	20	10	5	3.00	5.00
}	25	10	10	3.00	6.50
1-7	30	15	10	4.50	6.50
3-9	35	15	10	4.50	8.00
0 or more	35	15	15	4.50	8.00

# Rollingstock

The change from electric traction to diesel operation is reflected in the following table which shows details of rollingstock in selected years.

State Transport Authority: Bus and Tram Division, Rollingstock and Seating Capacity at 30 June

Particulars	1950 (a)	1955	1960	1965	1970	1975 (b)
Rollingstock:						
Electric trams	279	178	30	30	26	26
Motor buses	81	140	364	353	344	684
Trolley buses	61	91	56	_	-	_
Total vehicles	421	409	450	383	370	710
Seating capacity:						
Electric trams	14 280	10 147	1 908	1 908	1 664	1 664
Motor buses	3 998	5 268	14 428	14 112	14 234	30 515
Trolley buses	2 984	4 184	2 006			. —
Total seating	21 262	19 599	18 342	16 020	15 898	32 179

<sup>(</sup>a) At 31 January.(b) Not comparable with previous years: includes details of licensed private services taken over in March 1974.

Under a three year program, completed late in 1972 at a cost of \$5.2 million, the Trust replaced its fleet of buses with vehicles designed for one-man

operation. These vehicles have rear mounted engines, lower step height and two-way radio contact with the depot.

The vehicles obtained through takeover of the licensed private operators will be gradually replaced with the standard types.

### **Accident Casualties**

The following casualties resulted from accidents which occurred during the last five years.

State Transport Authority: Bus and Tram Division, Accident Casualties

Year -	Passe	engers	Emp	loyees		otal ng other)
1 Gai	Killed	Injured	Killed	Injured	Killed	Injured
1970-71		109 119 120 120 167		71 88 71 111 209	1 3 —	200 235 219 265 413

#### METROPOLITAN PRIVATE MOTOR BUS SERVICES

The route length of private motor bus services licensed by the Municipal Tramways Trust increased from 74·70 kilometres in 1941 to 465·02 kilometres in 1972-73, while the number of passengers carried increased from 2·3 million to 16·6 million. A large part of the increase in the number of passengers carried occurred in the ten years from 1941 (2·3 million) to 1951 (10·7 million). The transfer of the majority of the licensed private bus operators to the Municipal Tramways Trust in March 1974 is reflected in the decreased figures for 1973-74 and 1974-75.

Private Motor Buses, Metropolitan Services

Year	Route Length At End of Yea	Kilometres Run r	Passengers Carried A	Rolling Stock t End of Yea	Traffic Receipts (Gross)
	Kilometres	'000 km	'000	No.	\$'000
1970-71	. 406	10 740	14 856	253	2 523
1971-72	. 409	10 854	15 329	257	2 716
1972-73	. 465	11 032	16 600	267	2 992
1973-74	. 48	7 746	11 257	30	2 291
1974-75	. 13	805	1 434	5	313

#### COUNTRY TOWN BUS SERVICES

Commencing in May 1975, the South Australian Government offered financial assistance, through local government, to urban bus services outside of the metropolitan area. Under the new arrangement, financial responsibility for the provision of bus services is vested in the local government authority but the State Government contributes two-thirds of the operating loss.

Councils have the option of acquiring local bus fleets, or arranging for a local bus proprietor to provide the bus service under contract. In the case of the contract system, the fare revenue is retained by the local government authority and the contractor is paid an agreed sum per kilometre to operate buses on routes and timetables determined by a three-man management committee. The committee consists in each case of an elected council representative, the Town Clerk or his deputy, and a representative of the South Australian Government.

Contract services are operated in Port Pirie, Port Augusta and Port Lincoln. The Mount Gambier City Bus Service is still operated under licence by a private firm without subsidy. In Whyalla, the City Council has purchased the assets of the former bus proprietor, and since 13 October 1975 the bus service has been municipally owned and operated.

# INTERSTATE AND COUNTRY SERVICES

Regular interstate coach services and special tours operate to all States. In addition, a network of coachlines operates on radial routes from Adelaide to all parts of the State. These services are provided by 14 private companies, under licence to the State Transport Authority, and share a modern off-street terminal in Franklin Street, Adelaide.

Passenger services on all roads south of the 32nd parallel of south latitude are controlled by the State Transport Authority. Generally, pick-up and set-down rights on the routes are non-competitive with rail services or with other road service operations. The Authority also issues permits for coach charter trips within the State.

#### **TAXICABS**

The Metropolitan Taxi-Cab Act, 1956-1974, administered by the Metropolitan Taxi-Cab Board, is the governing legislation providing for the control of taxicabs within a 16 kilometre radius of the GPO, Adelaide and the District Councils of Stirling and Munno Para, the Cities of Tea Tree Gully, Elizabeth and Salisbury and the Municipality of Gawler. The Board is responsible for the granting of licences or permits to operate taxi-cabs, the allotment of vehicles to stands and the charging of permit fees.

Regulations under the Act provide for the examination of taxi-cabs: the roadworthiness of all taxi-cabs is examined by the Police Department each year and the Board's inspectors check and test all meters. It is compulsory for taxis to be fitted with meters which record progressively the cost of each journey at rates prescribed from time to time. At January 1976 the rates were 40 cents for 'flag fall' and the first 200 metres, then 5 cents each additional 200 metres. The area in which these metered charges apply is determined by the Board and is known as the 'metered area'. Outside of this zone but within an area of 40 kilometres radius from the GPO Adelaide, a 50 per cent loading applies. For journeys which extend beyond the 40-kilometre radius contract rates not to exceed 17 cents per outward and return kilometre are charged.

Licences issued at 30 June 1975 include taxi-cabs, white plates (*i.e.* restricted) 250, green plates 580; hire cars 43; and funeral cars 10. Drivers' licences current totalled 3 077.

Taxi licence fees are \$45 a year and private hire licence fees are \$32. Revenue received during 1974-75 was \$33 376 from taxi licences, \$1 249 from hire car licences and \$13 613 from drivers' licences. Total revenue from all sources was \$108 820, and expenditure was \$111 126.

In areas not under the control of the Metropolitan Taxi-Cab Board, taxi licences are issued by local government authorities under the provisions of the Local Government Act.

#### MOTOR VEHICLES

#### Control of Road Traffic

Legislation covering the registration of motor vehicles, licensing of drivers and third party insurance in South Australia is contained in the Motor Vehicles Act, 1959-1975.

The present legislation for the control of road traffic in South Australia is set out in the Road Traffic Act, 1961-1975 and the Motor Vehicles Act, 1959-1975.

# Registration of Motor Vehicles

Under the provisions of the Motor Vehicles Act, 1959-1975 all motor vehicles, unless specifically exempted, must be registered with the Registrar of Motor Vehicles before being driven on any public road.

The Motor Vehicles Act defines a motor vehicle as:

- (a) a vehicle, tractor or mobile machine driven or propelled by a steam engine, internal combustion engine, electricity or any other power not being human or animal; or
- (b) a trailer:

but does not include a vehicle run upon a railway or tramway.

Permits to use vehicles, without registration, between farm blocks may be granted by the Registrar. A 14-day permit to drive a motor vehicle pending registration may be issued, under certain circumstances, by a member of the police force stationed at a police station more than 40 kilometres from the GPO, Adelaide, except in those places where a branch of the Motor Registration Division is in operation.

Registration fees vary according to the power-weight (PW) of the vehicle; this is calculated by a formula which takes into account the diameter and number of the cylinders and the vehicle's weight in kilograms. A special formula applies for vehicles fitted with non-piston engines. Fees for trailers and caravans are based on unladen weight and vehicles fitted with solid rubber or metal tyres are subject to higher rates.

For motor cycles the fees vary between \$5 for a vehicle weighing 50 kilograms or less to \$10 for a motor cycle having a side car attached. For commercial vehicles the range of fees is from \$9 for a vehicle not exceeding 10 PW to \$84.50 plus \$9.80 for each 5 PW or portion thereof exceeding 75 PW, for vehicles exceeding 75 PW. For private vehicles a minimum annual fee of

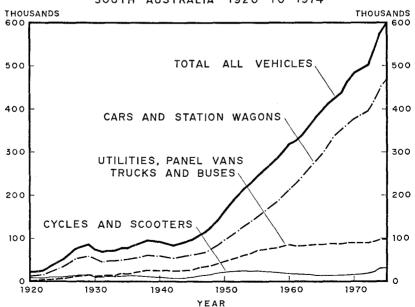
\$9 applies for vehicles that do not exceed 10 PW and for vehicles in excess of 75 PW a maximum fee of  $$60 \cdot 20$  plus  $$5 \cdot 90$  for each 5 PW or portion thereof the PW of the vehicle exceeds 75. Registration fees for trailers (with pneumatic tyres) range from  $$7 \cdot 50$  for trailers of unladen weight up to 260 kilograms to \$22 for trailers of unladen weight exceeding 2 030 kilograms. Registration fees for caravans range from  $$7 \cdot 50$  for caravans of unladen weight up to 260 kilograms to  $$15 \cdot 00$  for caravans of unladen weight exceeding 2 030 kilograms.

Motor vehicles used for certain purposes are registered without fee, e.g. vehicles owned by the Fire Brigades Board and other firefighting organisations, ambulances (for the use of which no charge is made), council vehicles used solely or mainly for the collection and transport of household refuse, etc. Registration at reduced rates is allowed for primary producers' commercial vehicles and tractors, prospectors' vehicles, and for vehicles used wholly or mainly in outer areas. Reduced rates are available to incapacitated ex-servicemen also, and to some persons in receipt of Australian Government pensions. Vehicles used solely for interstate trade can be registered for \$5 for a period of twelve months.

The Act provides for registered vehicles to carry number plates and for a registration label to be affixed to each registered vehicle. It also provides for the issue of general traders plates and limited traders plates.

Third party bodily injury insurance as a prerequisite to registration of a motor vehicle is discussed on page 556.

# MOTOR VEHICLES ON REGISTER



# Motor Vehicles on Register

The following table shows the number of motor vehicles on the register at 31 December from 1970 to 1974.

Motor Vehicles on Register, South Australia(a)
At 31 December

Type of Vehicle	1970	1971	1972	1973	1974
			'000		
Cars	324.8	339-2	356.2	378-8	398.8
Station wagons	59-2	61.6	64.2	66.6	67.9
Commercial vehicles	90.7	91.4	92.9	97.8	98.1
Motor cycles	15.4	18.1	22.7	29.2	31.6
Total on register	490-1	510-3	536-0	572-4	596-5
Population per vehicle	2.36	2.30	Persons 2·22	2·12	2.08
•			'000		
Tractors, plant, equipment	7.2	7.2	7.3	7.5	7.0
Trailers and caravans	93.1	97.6	106.0	116.2	122.3
Fraders plates	2.9	2.9	2.8	2.7	2.9

<sup>(</sup>a) Includes Australian Government owned vehicles except defence services vehicles.

# **New Motor Vehicle Registrations**

New motor vehicle registrations during the calendar years 1971 to 1975 are shown in the following table.

New Motor Vehicle Registrations, South Australia (a)

Type of Vehicle	1971	1972	1973	1974	1975
Cars	33 563	32 779	38 333	40 598	42 045
Station wagons	4 134	4 193	4 887	5 593	6 027
Light commercial type vehicles:					
Open (b)		3 141	3 667	4 181	3 761
Closed $(c)$	(d) 5 945	1 258	1 693	2 155	2 942
Trucks (e)	(,	2 376	2 949	2 797	3 195
vehicles $(f)$		69	80	18	33
Buses	337	326	251	196	269
Motor cycles	4 474	6 523	10 877	9 586	7 655
Total	48 453	50 665	62 737	65 124	65 927

<sup>(</sup>a) Includes Australian Government owned vehicles except defence services vehicles.
(b) Includes utilities and trucks with carrying capacity under 1 tonne.
(c) Includes panel vans and trucks with carrying capacity under 1 tonne.
(d) A new classification was adopted in 1972 and figures for earlier periods are not comparable.
(e) Includes utilities, panel vans and trucks with carrying capacity over 1 tonne.
(f) Includes truck type vehicles not designed for freight carrying e.g. tow trucks and fire engines.

In the following table new motor vehicle registrations are classified by horsepower (RAC).

# New Motor Vehicle Registrations: Classified by Horsepower (RAC) South Australia $^{(a)}$

Type of Vehicle and Horsepower	1971	1972	1973	1974	1975
Cars: Under 10 10-14 15-19 20-24 25-29 30-34 35 and over Rotary	221 4 786 7 662 2 768 3 687 10 375 3 733 331	190 5 255 6 580 3 532 3 615 8 956 4 314 337	208 7 063 7 855 2 300 4 495 10 187 5 547 678	61 8 857 8 543 2 735 3 760 10 156 5 939 547	1 9 572 10 667 2 987 3 060 10 460 5 064 234
Total	33 563	32 779	38 333	40 598	42 045
Station wagons: Under 20	504 941 2 376 313	424 1 210 2 178 381	925 1 058 2 357 547	1 410 1 125 2 495 563	2 018 629 2 745 635
Total	4 134	4 193	4 887	5 593	6 027
Light commercial type vehicles:  Open (b) (c);  Under 20	291 923 1 111 85 2 410	266 1 664 1 091 120 (c)3 141	454 1 390 1 588 235 3 667	636 1 435 1 692 417 4 180	792 965 1 543 461 3 761
Closed (c) (d); Under 20	737 427 233 12	615 290 311 42	713 380 485 115	800 588 491 276	1 079 577 812 474
Total	1 409	(c)1 258	1 693	2 155	2 942
Trucks (c) (e):  Under 20	289 315 853 360 257	328 541 955 315 306 (c)2 445	641 434 1 118 414 422 3 029	623 389 1 066 299 439	784 327 1 114 458 545 3 228

<sup>(</sup>a) Includes Australian Government owned vehicles except defence services vehicles.
(b) Includes utilities; from January 1972 includes utilities and trucks with carrying capacity under 1 tonne. (c) From January 1972 a revised classification of vehicles, based on load carrying capacity was introduced and figures for earlier periods are not comparable. (d) Includes panel vans; from January 1972 includes panel vans and trucks with load carrying capacity under 1 tonne, and ambulances and hearses.
(e) Includes tankers, concrete agitators and truck type vehicles which are not designed for freight carrying e.g. fire engines and tow trucks.

#### Drivers' Licences

From 1 April 1973, the following classes of drivers' licences have applied in South Australia:

Class 1: to drive (a) any motor car or (b) any motor vehicle, the weight of which (excluding the weight of any trailer) does not exceed 1 780 kilograms, except an articulated motor vehicle, a motor cycle or a motor omnibus;

Class 2: to drive any motor vehicle except an articulated motor vehicle, a motor cycle or a motor omnibus;

Class 3: to drive any motor vehicle except a motor cycle or a motor omnibus;

Class 4: to drive a motor cycle:

Class 5: to drive a motor omnibus.

A licence may be endorsed with more than one class number.

The Motor Vehicles Act provides that an applicant must apply for a permit to learn to drive a motor vehicle and will be issued with a learner's permit once he has passed a written examination on the rules of the road. The permit is for a period not exceeding three months during which time the holder is expected to undergo a practical test conducted by a police officer appointed for the purpose. If he passes the test he will be issued with a certificate stating the type and make of vehicle used and that he was capable of driving this class of motor vehicle. He may then apply to the Registrar for the appropriate licence.

Provision is also made for the testing of drivers suspected of being incompetent or suffering from a disease or disability which may impair their ability to drive, and for the suspension of their licences should they fail the test. Persons who will reach the age of 70 years during the currency of their next licence are tested before that licence is issued. Optical tests also are imposed at age 75 years.

From 1 October 1974 the licence fee has been \$5; the fee for a learner's permit is \$3. Licences and permits are not issued to persons under sixteen years of age.

In 1961 licences for motor driving instructors were introduced and are compulsory where instruction is given for reward. The licence fee is \$20 for a period of three years.

Drivers' and riders' licences current at 31 December 1975 totalled 637 248. The number in force first exceeded 100 000 in 1931, totalled 215 157 by 1951, 315 044 by 1957, and had risen to 447 985 at December 1965.

#### Revenue from Registrations and Licences

Revenue from registration fees and drivers' and riders' licence fees totalled \$29 452 000 in 1974-75. These fees are paid into Consolidated Revenue Account; but after deductions have been made for sinking fund and interest on loans raised for roads and bridges, and the administration expenses of the Highways Department and Motor Registration Division of the Department of Transport, the balance is paid into the Highways Fund.

#### Third Party Insurance

Under the Motor Vehicles Act, 1959-1975 every motor vehicle driven on a public road, unless specifically exempted, must be covered by an insurance policy. This policy insures the owner of the motor vehicle and any other person who at any time drives the vehicle whether with or without the consent of the owner, in respect of all liability for negligence that may be incurred by the owner or other person in respect of the death of, or bodily injury to, any person caused by, or arising out of the use of the vehicle in any part of Australia.

Insurance must be effected with the State Government Insurance Commission, which is now the only approved third party insurer. Liabilities of the insurer, set out in the Motor Vehicles Act, include the liability to pay for emergency treatment and hospital treatment to a person injured (including fatally injured) by or arising out of the use of an insured motor vehicle.

Where the driver of a motor vehicle has caused death or bodily injury in the use of that vehicle and the identity of the vehicle cannot be ascertained, then a person who could have obtained a judgment against the driver may give notice to the Minister of Transport and recover by action against a 'nominal defendant' named by the Minister of Transport. Payment by the nominal defendant is out of money contributed by all approved insurers under a scheme administered by the Minister of Transport.

The Minister of Transport appoints a 'nominal defendant' where a claim is made by a person in respect of death or bodily injury caused by negligence in the use of an uninsured motor vehicle on a road. Payments made by the 'nominal defendant' are recoverable from the driver of the motor vehicle or any person liable for the negligence of that driver.

An injured person may claim against his or her spouse where the spouse is an insured person and has caused that person bodily injury by negligence in the use of a motor vehicle.

A committee appointed by the Governor on the recommendation of the Minister of Transport having all the powers of a royal commission periodically inquires into and determines what premiums for third party insurance are fair and reasonable.

From 4 November 1975, premiums for private and business cars in metropolitan and country areas were increased by \$13.00 to \$71.00. Premiums for goods-carrying vehicles in the metropolitan area were increased by \$15.00 to \$85.00 while those in country areas were reduced by \$9.00 to \$55.00. Premiums for primary producers' trucks in the metropolitan area were reduced by \$17.00 to \$30.00 and those in country areas were reduced by \$2.00 to \$15.00. Premiums for taxis in the metropolitan area were increased by \$75.00 to \$275.00. Premiums for omnibuses in the metropolitan area were reduced by \$10.00 to \$250.00 while those in country areas were reduced by \$10.00 to \$45.00. Premiums for omnibuses not used for hire, fare or reward, in the metropolitan area were increased by \$25.00 to \$75.00 while those in country areas were reduced by \$10.00 to \$40.00. Premiums for other miscellaneous vehicles such as ambulances, tow trucks, mobile cranes, hearses etc., in the metropolitan area were increased by \$25.00 to \$50.00 and those in country areas were increased by \$5.00 to \$20.00. Premiums for motor cycles with an

engine capacity exceeding 250 cc in the metropolitan area were increased by \$35.00 to \$95.00 and those in country areas were increased by \$15.00 to \$55.00 Premiums for motor cycles with an engine capacity not exceeding 250 cc in the metropolitan area were increased by \$5.00 to \$35.00 while those in country areas were increased by \$25.00 to \$35.00.

#### Census of Motor Vehicles

A census of motor vehicles on the register at 30 September 1971 was completed in Australia during 1972. Details relating to South Australia appear in the South Australian Year Book 1975, pages 559-561.

#### Motor Vehicle Usage

In September 1971, a sample survey of motor vehicle usage during the year ended 30 September 1971 was conducted throughout Australia. Details relating to South Australia appear in the South Australian Year Book 1975, pages 561-2.

#### Road Traffic Board

The Road Traffic Board of South Australia, set up in 1960 under the provisions of the Road Traffic Board Act, 1960, is now constituted under the Road Traffic Act. 1961-1975; its functions are to:

- (1) make recommendations to the Minister on roads and traffic generally, on the use of traffic control devices and other measures to be taken to prevent road traffic accidents;
- (2) promote uniformity in the design and use of traffic control devices;
- (3) conduct research and collect statistics relating to road traffic accidents and other traffic problems;
- (4) disseminate information and advice on road safety and traffic laws and regulations;
- (5) investigate and report on proposals for alterations of and additions to traffic laws and regulations.

#### Road Safety

Some recent moves towards greater road safety were detailed on pages 514-5 of the South Australian Year Book 1973. These mainly related to the operations of the new Road Safety Instruction Centre and the points demerit scheme.

The latter scheme has been in operation since 29 April 1971. In 1975 warning notices were sent to 15 493 drivers who had accumulated six or more demerit points and 2 790 drivers with twelve or more demerit points had their driving licences suspended.

A Road Traffic Act Regulation introduced on 1 January 1973 requires that any modification to a motor vehicle should meet certain standards and that permission must be obtained from the Road Traffic Board before certain types of modifications can be made.

All imported motor vehicles must bear a compliance plate showing that the vehicle has been approved by the Australian Motor Vehicle Certification Board in regard to compliance with Australian Design Rules for Motor Vehicle Safety

applicable to the year of manufacture. Road Traffic Board exemption from this requirement is limited to migrants and returning overseas visitors who wish to register their vehicles in this State. Generally, vehicles originally manufactured as left-hand drive vehicles can only be registered in South Australia if they were manufactured before 1 January 1970 and converted to right-hand drive under the supervision of the Board.

Following an amendment to the Road Traffic Act, a different interpretation of 'STOP' signs became operative on 1 March 1975. Under the new legislation, a driver facing a 'STOP' sign must give way to all traffic, whether it is coming from the left or from the right. Previously, drivers had to give way only to the traffic from the right. The new legislation conforms with the National Traffic Code. Similar legislation is in force in Western Australia and Victoria.

In July 1975, a system of 'priority' roads was introduced in the State. Initially the main arterial roads in the metropolitan area were proclaimed 'priority' roads; this will be progressively extended to national highways and rural arterial traffic routes.

'STOP' and 'GIVE WAY' signs are used to control side street traffic. A heavy broken white line across the mouth of the side street together with 'PRIORITY ROAD' signs warn the motorists that the arterial road traffic has priority over traffic entering from the left or right.

#### Road Traffic Accidents

Statistics of road traffic accidents are compiled from reports made to members of the South Australian Police Department by persons involved in such accidents. Section 43 of the Road Traffic Act sets out the obligations of the driver of a vehicle involved in an accident—he must stop his vehicle at once, render any assistance of which he is capable to anyone injured in the accident, state his name and address if requested to any person having reasonable grounds for such request, and report the accident to the Police as soon as possible, or at least within twenty-four hours of the accident. However, it is a defence against a charge relating to non-reporting of an accident if a defendant can prove either that he did not know that an accident occurred or that the only damage or injury resulting from the accident was to property and that a fair estimate of the damage did not exceed \$100.

For the purpose of these statistics, a road traffic accident is defined as an accident which occurs because of the presence of a vehicle on a road (or other public thoroughfare, e.g. public car park, beach) and which involves property damage exceeding \$100 or casualty; a casualty occurring if the accident resulted in;

- (1) the death of any person within a period of thirty days of the accident, or
- (2) bodily injury to any person to an extent requiring surgical or medical treatment.

With the introduction of a more comprehensive accident report form on 1 October 1967, statistics have become available as a result of a joint effort by the South Australian Police Department, the Road Traffic Board of South Australia and the Australian Bureau of Statistics. Before this date, the South Australian Police Department was the sole authority preparing statistics of road traffic accidents.

The next table shows summary details of road traffic accidents for the years 1970 to 1974. During 1974 the total number of recorded road traffic accidents increased by more than 16 per cent (from 33 960 in 1973 to 39 633 in 1974). The number of accidents which resulted in casualties increased by about 2 per cent (from 9 267 in 1973 to 9 469 in 1974).

Road T	raffic	Accidents,	South	Australia
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	Acci- Total dents		D		Rate per 100 000 Motor Vehicles on Register (a)			Rate per 100 000 of Mean Population		
Year	Acci- dents Re- corded	Involv- ing Casu- alties	Persons Killed	Persons - Injured	Total Acci- dents Re- corded	Persons Killed	Persons Injured	Total Acci- dents Re- corded	Persons Killed	Persons Injured
1970	33 960	7 424 7 386 8 116 9 267 9 469	349 292 312 329 382	10 484 10 132 10 997 12 625 12 725	5 512 5 632 5 689 6 167 6 821	74 59 60 60 66	2 222 2 062 2 111 2 294 2 190	2 248 2 368 2 486 2 824 3 245	30 25 26 27 31	905 862 925 1 052 1 042

<sup>(</sup>a) 'Motor vehicles on register' is the mean number for each year; includes Australian Government owned vehicles except defence services vehicles; excludes road tractors and trailers.

In the following table, the types of road users killed and injured are shown according to age groups for 1974.

Road Traffic Accidents: Age Groups of Casualties, South Australia
1974

Age Group of Casualty (years)	Drivers of Motor Vehicles	Motor Cyclists	Pedal Cyclists	Passengers	Pedestrians	All Other	Total
			PER	SONS KIL	LED		
Under 5	. —			6	2	_	8
5-16	. 6	3	3	17	8	_	37
17-20	. 23	31		24	1		79
21-29	. 38	8	1	21	1		69
30-39	. 19	1	1	11	8	_	40
40-49 50-59	. 16 . 17	1 2	2 4	8	6 10	_	33 41
60 and over	32		6	15	22		75
oo and over	. 34			1.5			
Total	151	46	17	110	58		382
			PER	SONS INJU	RED		
Under 5			3	252	77		332
5-16	152	201	321	929	303	1	1 907
17-20	1 030	856	27	814	95		2 822
21-29	1 388	440	24	624	60	1	2 537
30-39 <i></i>	. 727	78	18	223	60	_	1 106
40-49	533	38	27	227	77	1	903
50-59	421	23	37	185	77	1	744
60 and over	332	7	37	230	133		739
Not stated	363	177	47	908	139	1	1 635
Total	4 946	1 820	541	4 392	1 021	5	12 725

Drivers (including motor cyclists) under twenty-one years of age, representing only 12 per cent of licence holders at 30 June 1974, accounted for 20 per cent of drivers involved in accidents, 32 per cent of drivers killed and 33 per cent of drivers injured during 1974. For drivers aged twenty-one to twenty-four years involvements were 13 per cent, deaths 12 per cent and injuries 16 per cent while their representation in the driving population was 11 per cent.

Pedestrians sixty years and over accounted for 14 per cent of pedestrians involved, 13 per cent of pedestrians injured and 38 per cent of pedestrians killed.

The likelihood of sustaining serious injury when involved in an accident is more than nine times higher for motor cycle riders than for drivers of motor vehicles: 65 per cent of motor cycle riders involved in accidents received medical or hospital treatment compared with 7 per cent of drivers of other vehicles.

The following table shows casualties by type of road user for each of the last five years. In each of these years more motor vehicle drivers were killed or injured than any other type of road user.

Road Traffic Accidents: Casualties, South Australia

	Year	Drivers of Motor Vehicles		Pedal Cyclists	Pass- engers	Pedes- trians	All Other	Total
			Pers	SONS KILL	ED			
1970 1971 1972 1973 1974		144 109 120 135 151	12 14 28 23 46	10 9 12 9 17	128 103 88 99 110	55 57 64 63 58		349 292 312 329 382
			Pers	ons Injur	RED			
1970 1971 1972 1973 1974		4 315 3 991 4 267 4 906 4 946	812 930 1 313 1 736 1 820	513 546 524 564 541	4 017 3 862 3 998 4 499 4 392	827 799 885 914 1 021	4 10 6 5	10 484 10 132 10 997 12 625 12 725

Details of road traffic accidents for 1974 according to time and day of occurrence are shown in the next table. More accidents occurred on Fridays (7 314 accidents) and Saturdays (6 634) than on other days of the week and more accidents occurred between 4 p.m. and 6 p.m. than during any other two-hour period. More accidents occurred between 4 p.m. and 6 p.m. on Fridays than on other days in that period and more deaths resulted from accidents occurring on Saturdays.

TRANSPORT

Road Traffic Accidents: Day of Week and Time of Occurrence, South Australia
1974

Time of	Occurrence	Monday	Tuesday	Wednes- day	Thursday	Friday	Saturday	Sunday	Total
After:	Until:			,	TOTAL A	CCIDEN	ITS		
Midnight 2 a.m. 4 a.m. 6 a.m. 8 a.m. 10 a.m. 12 noon 2 p.m. 4 p.m. 6 p.m. 8 p.m. 10 p.m.	2 a.m. 4 a.m. 6 a.m. 8 a.m. 10 a.m. 12 noon 2 p.m. 4 p.m. 6 p.m. 8 p.m. 10 p.m. Midnight	80 23 31 451 611 507 517 626 1 227 518 284 221	87 37 21 443 642 438 509 606 1 153 500 264 253	84 34 26 393 599 456 494 665 1 276 592 355 273	115 31 24 456 633 498 571 658 1 312 731 395 381	160 49 22 477 685 551 636 820 1 674 1 074 545 621	463 128 52 131 516 906 695 638 982 1 032 489 602	710 189 62 67 183 429 459 653 761 545 298 228	1 699 491 238 2 418 3 869 3 785 3 881 4 666 8 385 4 992 2 630 2 579
7	otal	5 096	4 953	5 247	5 805	7 314	6 634	4 584	39 633
After:	Until:			)	PERSONS	KILLEI	)		
Midnight 2 a.m. 4 a.m. 6 a.m. 8 a.m. 10 a.m. 12 noon 2 p.m. 4 p.m. 6 p.m. 8 p.m. 10 p.m.	2 a.m. 4 a.m. 6 a.m. 8 a.m. 10 a.m. 12 noon 2 p.m. 4 p.m. 6 p.m. 8 p.m. 10 p.m. Midnight	1  3 2 3 2 5 8 5 1 5		1 -4 3 1 1 4 6 2 5 4	5 1 — 1 — 4 5 2 6 6 4 9	4 2 2 1 4 2 9 5 10 18 7 7	12 3 5 3 2 5 3 5 15 21 12 15	11 9 3 — 1 6 3 5 9 10 6 3	33 18 10 19 18 21 24 32 58 66 35 48
1	otal	35	35	31	43	71	101	66	382
After:	Until:			P	ERSONS	INJURE	D		_
Midnight: 2 a.m. 4 a.m. 6 a.m. 10 a.m. 12 noon 2 p.m. 4 p.m. 6 p.m. 8 p.m.		35 5 10 139 131 125 149 168 331 194 126 118	42 20 7 114 170 101 125 143 300 169 75 115	37 11 7 112 146 112 145 180 303 198 125 121	54 12 9 125 170 107 141 173 380 249 163 161	70 28 6 122 178 138 180 179 407 359 247 268	256 81 33 49 128 214 225 222 375 360 170 261	328 80 41 32 61 163 169 313 331 268 138 92	822 237 113 693 984 960 1 134 1 374 2 427 1 797 1 044 1 136
. T	otal	1 531	1 381	1 497	1 744	2 182	2 374	2 016	12 725

Although more than two-thirds of all accidents occurred between 6 a.m. and 6 p.m. the severity of accidents, judged on the basis of death and injury rates, was considerably greater during the 'night' hours, as can be seen from the following table. Both deaths and injuries, expressed as a proportion of accidents occurring, were significantly higher during each two-hour 'night' period than for any two-hour period between 6 a.m. and 6 p.m.

Accidents and Casualties: Time of Day, Fatality and Injury Rates South Australia, 1974

Time of Occurrence		Accidents Occurring	Persons Killed	Persons Injured	Persons Killed Per 100 Accidents Occurring	Persons Injured Per 100 Accidents Occurring
After:	Until:					
Midnight	t 2 a.m.	1 699	33	822	1.9	48
2 a.m.	4 a.m.	491	18	237	3.7	48
4 a.m.	6 a.m.	238	10	113	4.2	47
6 a.m.	8 a.m.	2 418	19	693	0.8	29
8 a.m.	10 a.m.	3 869	18	984	0.5	25
10 a.m.	12 noon	3 785	21	960	0.6	25
12 noon	2 p.m.	3 881	24	1 134	0.6	29
2 p.m.	4 p.m.	4 666	32	1 378	0.7	30
4 p.m.	6 p.m.	8 385	58	2 427	0.7	29
6 p.m.	8 p.m.	4 992	. 66	1 797	1.3	36
8 p.m.	10 p.m.	2 630	35	1 044	1.3	40
10 p.m.	Midnight	2 579	48	1 136	1.9	44
	Total	39 633	382	12 725	1.0	32

The following table shows the nature of accidents which occured in 1974.

Road Traffic Accidents: Nature, South Australia, 1974

Total Accidents Reported	Accidents Involving Casualties	Persons Killed	Persons Injured
833	382	57	699
10 289	1 544	10	1 994
13 118	3 257	79	4 696
4 818	613	16	813
1 788	980	48	1 329
3 658	1 228	105	1 601
3 618	326	9	417
1 020	1 015	56	1 030
351	53		67
46	46	1	47
94	25	1	32
39 633	9 469	382	12 725
	833 10 289 13 118 4 818 1 788 3 658 3 618 1 020 351 46 94	Reported         Involving Casualties           833         382           10 289         1 544           13 118         3 257           4 818         613           1 788         980           3 658         1 228           3 618         326           1 020         1 015           351         53           46         46           94         25	Accidents Reported         Involving Casualties         Killed           833         382         57           10 289         1 544         10           13 118         3 257         79           4 818         613         16           1 788         980         48           3 658         1 228         105           3 618         326         9           1 020         1 015         56           351         53         —           46         46         1           94         25         1

<sup>(</sup>a) 'Vehicles' includes motor vehicles, motor cycles, pedal cycles, trains, trams, etc.

<sup>(</sup>b) Vehicles leaving road and then colliding are shown in the four categories below.

The following table shows details of features of the roadways on which the accidents occurred. During 1974 there were 20 561 accidents at intersections (52 per cent of accidents reported) and approximately one-half of the total number of injuries occurred at intersections. However, of the 382 road deaths, 40 per cent were on straight roads compared with 29 per cent at intersections: a further 22 per cent of deaths occurred on bends or curves.

Road Traffic Accidents: Features of Roadways on which Accidents Occurred South Australia, 1974

Features of Roadway	Total Accidents Reported	Accidents Involving Casualties	Persons Killed	Persons Injured
Intersections:				
Controlled	5 840	1 197	26	1 735
Uncontrolled	14 721	3 656	86	4 967
Other than intersections:	,			
Straight road	14 335	3 328	153	4 201
Bend or curve	2 380	856	83	1 227
Railway level crossing:			-	
Controlled	85	24	7	29
Uncontrolled	71	29		51
Other location	2 201	379	27	515
Total	39 633	9 469	382	12 725

Collisions between vehicles accounted for 73 per cent of all accidents and 42 per cent of deaths, while vehicles overturning or leaving the road and vehicles colliding with pedestrians accounted for 5 per cent and 3 per cent of all accidents respectively, and 13 per cent and 15 per cent of deaths.

Details concerning use or non-use of seat belts by drivers involved in accidents in 1974, are shown in the following table.

Road Traffic Accidents: Seat Belt Usage of Motor Vehicle Drivers and Front Seat Passengers, South Australia, 1974

Seat Belt Details –		Drivers (a)	Front Seat Passengers (b)		
Seat Belt Details –	Killed	Injured	Not Injured	Killed	Injured
Seat belts fitted:					
Reported as worn	24	1 662	31 258	15	587
Reported as not worn	44	363	3 217	18	195
Seat belts not fitted	39	777	8 428	7	282
Information not available	44	2 127	19 839	31	1 437
Total	151	4 929	62 742	71	2 501

<sup>(</sup>a) Any person occupying the driver's seat in a parked vehicle is excluded.

<sup>(</sup>b) Refers to passengers in front seat, left side. Excludes front seat occupants of parked vehicles.

Information concerning the use or non-use of seat belts was recorded for 71 passengers killed while occupying the left hand front seat of a vehicle.

The next table shows the age group and sex of persons holding drivers licences and permits at 30 June 1974 and involvements in accidents during 1974 of drivers and riders within the same classifications. In this table figures for involvements relate to accidents occurring in South Australia whereas licence and permit holders are those licences, etc., issued in South Australia, and the licences on issue at 30 June are only an approximation of the average for the year.

Road Traffic Accidents: Age and Sex of Licensed Drivers and of Drivers and Riders Involved in Accidents, South Australia (a)

1974

Age (Years)	Riders an Holders at	Drivers nd Permit 30th June	of Driv	nvolvement vers and ers (b)	Accident Involvement Rate per 100 Licensed Drivers and Riders		
* .	Males	Females	Males	Females	Males	Females	
Under 20	37 050	21 763	10 244	1 839	27.6	8.5	
20-24	51 198	36 447	10 579	2 526	20.7	6.9	
25-29	49 129	36 208	6 859	1 908	14.0	5.3	
30-34	38 319	27 904	4 485	1 419	11.7	5.1	
35-39	33 753	22 928	3 915	1 282	11.6	5.6	
40-44	33 137	20 317	3 723	1 002	11.2	4.9	
45-49	35 941	20 692	3 741	888	10.4	4.3	
50-54	32 055	17 940	3 162	777	9.9	4.3	
55-59	25 349	13 112	2 245	534	8.9	4.1	
60-64	21 436	10 009	1 777	362	8.3	3.6	
65-69	14 324	5 781	1 028	195	7-2	3.4	
70-74	7 898	2 512	529	159	6.7	6.3	
75-79	3 761	1 104	273	55	7.3	5.0	
80 and over	1 842	363	112	23	6.1	6.3	
Not stated	_	_	6 884	2 333	••	••	
Total	385 192	237 080	59 556	15 302	15.5	6.5	

<sup>(</sup>a) Includes both licensed riders and permit holders.

It should be noted in particular that these figures do not measure exposure to risk: for example they take no account of distances driven, times of day into which driving may be concentrated or traffic conditions during those times.

The following additional limitations should be observed when interpreting the figures:

<sup>(</sup>b) Drivers and riders involved in more than one accident during the year are included once for each accident.

- (i) All figures include permit holders; the accident involvement of permit holders, who are permitted to drive a vehicle only when accompanied by a fully licensed driver, appears, from an examination of the relevant data, to be significantly lower than that of fully licensed drivers. At 30 June 1974 there were 13 652 permit holders; of these 4 859 or approximately one-third were aged 16 years and 9 517 or just over two-thirds of the total were aged 20 years or less: thus if permit holders and their involvements in accidents were excluded from the table, it could be expected that the involvement rates in the lower age groups would be higher than those shown.
- (ii) The number of involvements with ages not stated is high; and their age distribution, if known, might be different from that of known cases.

#### SHIPPING

#### Control of Shipping

The Australian Parliament is empowered under the Constitution to make laws in respect of trade and commerce with other countries and among the States

Navigation and shipping are regulated under the Navigation Act 1912-1973 and the provisions of the Act apply to ships registered in Australia (except those engaged solely in the domestic trade of any one State) and other British ships whose first port of clearance and whose port of destination are within Australia. Other shipping Acts under the trade and commerce power are the Sea-Carriage of Goods Act 1924-1973, the Seamen's Compensation Act 1911-1974, the Seamen's War Pensions and Allowance Act 1940-1974, the Australian Coastal Shipping Commission Act 1966-1974, the Australian Coastal Shipping Agreement Act 1956 and the Stevedoring Industry Act 1956-1973.

Shipping in South Australia is controlled by the *Navigation Act* 1912-1973 and, where this does not apply, by the Harbors Act, 1936-1974 and the Marine Act, 1936-1975. Both of the State Acts are administered by the Department of Marine and Harbors.

#### Registration of Ships

Registration of ships in Australia is in accordance with the Merchant Shipping Act 1894 of the Imperial Parliament, under sections which apply to the United Kingdom and all British dominions. Registration is not compulsory for vessels of less than 15 net tons engaged in river or coastal trade or for larger vessels not engaged in trade. Yachts and small trading vessels may be registered at the request of the owners as registration facilitates the sale or mortgage of these vessels. An annual review of the register is carried out but some vessels whose present ownership or use cannot be traced, are retained on the register in the absence of any positive justification for their removal.

Four different measures of tonnage (gross, net, displacement, or deadweight) may be applied to a vessel. Gross tonnage is the total enclosed cubic capacity of the ship on a basis of 2.83 cubic metres a ton; net tonnage is the cubic

capacity available for cargo in terms of 2.83 cubic metres a ton; displacement tonnage is the weight of water displaced by a ship; deadweight tonnage is the total weight of fuel, water, stores and cargo that a ship can carry. Passenger ships are commonly rated by the gross tonnage, cargo ships by their net tonnage, warships by their displacement tonnage, and oil tankers by their deadweight tonnage.

The following table shows the number of vessels on the South Australian Register at 31 December 1975.

Shipping, Vessels on South Australian Register
At 31 December 1975

Net Tonnage	Steam and Motor				g (including Auxiliary F		Barges, Hulks, Dredges, etc. not Self-propelled		
	Vessels	Gross Tonnage	Net Tonnage	Vessels	Gross Tonnage	Net Tonnage	Vessels	Gross Tonnage	Net Tonnage
Under 50	81	4 894	1 629	93	1 593	1 293	_		_
50-99	30	2 572	1 774	9	1 055	932			_
100-199	10	2 347	1 571	2	679	309	1	179	179
200-499	1	350	234	_		_	1	319	319
500-999	2	4 237	1 543		-		1	762	760
1 000-2 999	1	4 174	1 327		_	-		_	
3 000 and over	3	21 961	13 253	_	<b>—</b> ,	_	-		_
Total	128	40 535	21 331	104	3 327	2 534	3	1 260	1 258

#### **Registration of Motor Boats**

The Boating Act, 1974-1975 gives power to the South Australian Minister of Marine to regulate boating and other activities within South Australian waters. The main provisions of the Act refer to the registration of motor boats and the licensing of motor boat operators.

Any boat that is propelled by an engine, whether of not that engine is the main means of propulsion, must be registered and have its registration number displayed on the hull. Motor boats that are already registered and bear an identification mark under the provisions of any other Act are exempted from these requirements. The registration number consists of two letters followed by two digits and the letter 'S' denoting South Australia. The fee for the initial registration period is \$5.00. A registration may be renewed annually, but, for a boat that is less than 3.048 metres in length and powered with an engine that develops less than 5 horsepower, a renewal fee is not required.

Only persons, sixteen years of age or older, may be issued with a motor boat operator's licence which remains in force without renewal unless cancelled or suspended under the Act or voluntarily surrendered. A person aged between twelve and sixteen years may be issued a permit to operate a motor boat subject to certain restrictions. The other provisions of the Act deal with unseaworthy boats, wrecks and abandoned boats, speed restrictions, rules for water ski-ing, reckless and dangerous operation, the reporting of accidents, etc.

Details of the minimum safety equipment required to be carried in a motor boat are listed in the Act's Regulations; these vary according to the length of the motor boat and whether it operates in in-shore or off-shore waters.

#### Shipping Search and Rescue

The Shipping Search and Rescue organisation (SAR), administered by the Department of Transport co-ordinates the marine search and rescue operations for which the Australian Government is responsible. The SAR also co-operates with the appropriate authorities in other marine emergencies.

#### Shipping Arrivals at South Australian Ports

Shipping figures are based on returns rendered to the Collector of Customs by shipping companies, or their agents, in respect of trading vessels exceeding 200 net tons: each arrival at and departure from a South Australian port is recorded. In the following tables the column headings, coastal and overseas, indicate the classification of vessels regardless of the division of trade on which the vessels were engaged at any particular time.

The two tables below show arrivals of coastal and overseas vessels at individual Customs ports and at all ports in South Australia respectively.

Shipping: Vessels Entered at Customs Ports, South Australia, 1974-75

		Coa	stal		- Overseas		T-	1
Port	Intrastate		Interstate		Overseas		Total	
roit	Number	Net Tonnage	Number	Net Tonnage	Number	Net Tonnage	Number	Net Tonnage
		,000		'000		'000		*000
Ardrossan	28 1	89 3	18 4	66 11	21 14	117 50	67 19	272 64
Edithburgh Port Adelaide (a)	342	304	191	629	575	3 154 10	1 108	4 087 10
Port Augusta Port Lincoln Port Pirie	<del>56</del>	62 31	13 48	102 270	89 92	645 563	158 146	809 863
Port Stanvac Rapid Bay	19 26	197 68	24 12	328 43	25 1	713 2	68 39	1 238 113
Stenhouse Bay Theyenard	-8	34	38	164	54	232	100	430
Wallaroo Whyalla	44	144	174	1 370	36 93	260 855	36 311	260 2 369

<sup>(</sup>a) Inner and outer harbour.

Shipping, Vessels Entered at South Australian Ports

			Coa	ısta <b>l</b>		0	rseas	Tr.	otal
	37	Intra	istate	Inter	state	- Ove.	1 Seas	10	riai
	Year	Number	Net Tonnage	Number	Net Tonnage	Number	Net Tonnage	Number	Net Tonnage
		·	'000		'000		'000		'000
1970-71 1971-72 1972-73 1973-74 1974-75		 857 744 913 915 912	1 446 1 181 1 515 1 422 1 233	612 632 604 542 522	3 998 3 767 3 786 3 226 2 982	1 198 1 069 1 006 1 005 1 024	7 306 6 765 6 172 6 413 6 760	2 667 2 445 2 523 2 462 2 458	12 749 11 714 11 472 11 061 10 975

The next table shows arrivals of vessels exceeding 200 net tons at selected customs ports only, according to country of registration of the vessels.

Shipping: Country of Registration, Vessels Entered at Selected Customs Ports
South Australia

Contain Br	O-market AP 11 11	Ves	sets	Net T	onnage
Customs Port	Country of Registration	1973-74	1974-75	1973-74	1974-75
Ardrossan	Australia	46	49	179 500	160 842
	Other countries	17	18	100 942	111 579
	Total	63	67	280 442	272 421
ort Adelaide		493	504	902 203	949 671
	Greece	43 19	33 17	329 301 95 401	224 044 80 427
	Japan	41	49	218 601	290 320
	Liberia	34	46	203 181	309 572
	New Zealand	31 60	22 26	161 024	112 108
	Norway	23	34	114 042 192 947	32 410 219 647
	Sweden	43	36	171 831	232 855
	United Kingdom	170	136	906 420	722 957
	Other countries	160	205	743 719	913 005
	Total	1 117	1 108	4 038 670	4 087 016
ort Lincoln	Australia	75	70	189 059	169 128
	Greece	1 <u>7</u>	16	116 871	110 165
	Liberia	.7	10	49 721	80 326
	Other countries	16 33	18 44	136 470 188 396	160 191 289 433
	Total	148	158	680 517	809 243
Port Pirie	Australia	65	54	368 256	300 504
	Greece	7	8	47 679	55 489
	India	16	9 6	71 032	45 742
	United Kingdom	12 34	40	24 750 244 737	11 073 281 464
	Other countries	29	29	153 456	168 777
	Total	163	146	909 910	863 049
Port Stanvac	Australia	50	43	565 795	524 947
	Norway	10	5 5	305 787	145 996
	United Kingdom	10 10	15	252 339 286 695	101 410 465 524
	<b>77</b> -4-1	80	68		
	10tal	80	- 08	1 410 616	1 237 877
hevenard	Australia	32	47	138 277	201 176
	Liberia	7 37	2 21	42 422 69 830	13 582 39 715
	Other countries	38	30	212 185	175 162
	Total	114	100	462 714	429 635
Whyalla	Australia	191	207	1 410 029	1 189 899
	Liberia	12	17	130 545	191 375
	United Kingdom	38	34	499 496	478 799
	Other countries	44	53	375 100	508 741

#### Cargo Handled at Major Ports

The South Australian Department of Marine and Harbors records details of cargo handled at major ports in this State and the following table shows details for each of the last five years.

Cargo 1	Handled:	Major	Ports.	South	Australia
---------	----------	-------	--------	-------	-----------

Port				1969-70	1970-71	1971-72	1972-73	1973-74
					,	000 tonne	s	
Ardrossan		 		509	620	581	519	522
Ballast Head		 		161	166	177	184	200
Kingscote		 		152	137	144	164	209
Klein Point				483	413	576	606	559
Port Adelaide				3 858	3 431	3 510	3 574	4 357
Port Augusta				47	49	33	42	31
Port Giles		 		_	145	129	73	99
Port Lincoln				909	785	748	588	739
Port Pirie		 		1 478	1 458	1 399	1 292	1 324
Port Stanvac				2 799	3 039	2 887	2 912	2 964
Proper Bay				510	470	353	231	102
Rapid Bay		 		301	307	205	291	243
Stenhouse Bay		 		185	173	159	24	14
Thevenard		 	•	498	558	721	757	975
Wallaroo			• •	366	377	286	221	303
Whyalia			•	8 712	8 584	7 053	7 869	6 930
Other ports	••	 • •	• •	43	40	44	46	47
Total		 		21 011	20 752	19 006	19 393	19 618

#### Overseas Shipping Cargo

Overseas shipping cargo statistics are compiled from returns submitted by shipping companies, or their representatives, to Customs Houses at each port in South Australia. A return is required for each movement of a vessel into and out of a port except for naval vessels, yachts and other craft used for pleasure, foreign fishing vessels that neither load nor discharge cargo and vessels not exceeding 200 net tons.

Cargo is recorded in terms of either units of weight or units of volume depending on the basis on which freight is charged. The statistics show separate figures for cargo recorded in tonnes weight and cargo recorded in cubic metres. The aggregates for weight and volume cargo are not added to a figure for total cargo because they are unlike quantities, and comparisons of total cargo between ports, trade routes or periods of time could be affected by variations in the cargo mix and in the basis on which freight is charged.

The following figures show, for the years 1972-73 and 1973-74, particulars of cargo loaded in South Australia for discharge overseas, and of cargo discharged in South Australia from overseas, classified according to major trade areas.

Shipping: Cargo Loaded in South Australia, Trade Area of Destination

Canaa I aadad fan Danta in	1972	2-73	1973	1973-74		
Cargo Loaded for Ports in—	Tonnes Weight	Cubic Metres	Tonnes Weight	Cubic Metres		
North America and Hawaijan Islands:						
Northern Area;						
USA	63 749	759	16 963	2 148		
Canada	4 906	981	1 252	2 670		
Central America		2	135	6		
Bermuda and Caribbean Area	1 041	2 279		2 593		
South America	207 385	168	128 544	4		
Europe (excluding USSR):				•		
Northwestern, Central and Baltic;						
United Kingdom	117 991	14	160 159	2		
Other	492 328	2 486	416 515	7 336		
Southern Area	14 190	2 362	15 537	1 746		
USSR (in Europe and Asia)	352 766	_	9 966	4		
Africa	117 594	31 864	211 685	70 898		
Asia (excluding USSR)	2 342 533	59 548	3 094 910	81 765		
Papua and New Guinea, New Zealand	2012000	0,010	0 00 1010	01 705		
and Pacific Islands	219 976	115 683	316 361	119 703		
Indian Ocean Islands and Antarctica		_	8	10		
Total cargo loaded	3 934 460	216 146	4 372 035	288 885		

## Shipping: Cargo Discharged in South Australia, Trade Area of Origin

Cargo Discharged from Bouts in	1972	2-73	1973	3-74
Cargo Discharged from Ports in—	Tonnes Weight	Cubic Metres	Tonnes Weight	Cubic Metres
North America and Hawaiian Islands:				
Northern Area;				
USA	19 787	34 094	152 196	52 393
Canada	105 396	71 736	16 984	73 222
Central America				3
Bermuda and Caribbean Area	5	78	508	193
South America	1 026	256		5
Europe (excluding USSR):				_
Northwestern, Central and Baltic;				
United Kingdom	1 431	5 612	2 635	5 802
Other	8 902	11 646	13 274	27 376
Southern Area	815	4 594	1 409	7 783
USSR (in Europe and Asia)		23	73	1 045
Africa	52 581	3 122	5 550	4 620
Asia (excluding USSR)	1 662 890	111 792	1 763 682	184 471
Papua and New Guinea, New Zealand	1 002 050	111 .,2	1 .05 002	10
and Pacific Islands	251 496	8 160	310 776	5 114
Indian Ocean Islands and Antarctica	87 983	<del>-</del>	160 503	
	0. 705			
Total cargo discharged	2 192 310	251 113	2 427 590	362 027

#### Distances to Overseas Ports

Distances in nautical miles from Port Adelaide to principal overseas ports are shown in the following table. Distances by sea from Port Adelaide to the ports of other Australian capital cities are given on page 536.

### Distances from Port Adelaide to Principal Overseas Ports

Port Adelaide to:	Nautical Miles	Port Adelaide to:	Nautical Miles
Africa; Cape Town	5 603	New Zealand; Auckland	2 035
Cape Iown	3 003	Wellington	1 880
Asia;		North America;	
Colombo	4 3 1 0	Baltimore $(b) \dots \dots$	10 291
Djakarta	3 047	Montreal $(b)$	11 538
Hong Kong	4 782	New York $(b) \dots \dots$	10 367
Singapore	3 515	Panama	8 307
Yokohama	5 281	San Francisco	7 372
Europe (a);		Vancouver	7 752
Liverpool	11 679	South America;	
London	11 720	Buenos Aires $(c)$	7 769
Marseilles	11 417	Rio de Janeiro $(c)$	8 586
Naples	11 697	Valparaiso	6 670

<sup>(</sup>a) Via Cape Town. (b) Via Panama. (c) Via Cape Horn.

#### Passenger Movement by Sea

Statistics of passengers disembarking, embarking and passing through Australian ports are compiled according to type of passenger—namely overseas, direct transit, interstate or cruise. 'Overseas' passengers are defined as persons travelling to or from overseas destinations and who embark or disembark in Australia; 'direct transit' as persons on vessels calling at Australian ports and who have embarked at an overseas port for an overseas destination; 'interstate' as persons travelling by sea from one Australian State to another, or travelling from and to the same port or a port in the same State via other States; and 'cruise' as persons on an overseas journey which begins and ends in Australia, does not exceed thirty days, is confined to specific ports in the South-West Pacific area and has been classified as a cruise to enable certain documentation requirements to be waived. Information about passengers is obtained from ships' manifests, passenger cards completed by passengers, and the Departments of Transport, and Police and Customs.

The following table shows numbers and types of passengers who disembarked, embarked and passed through South Australian ports during the five years 1970 to 1974.

Shipping: Passenger Movement by	Sea,	South	Australian	Ports(a)
---------------------------------	------	-------	------------	----------

				Type of 1	Passenger		
	Year		Overseas		Total	(including Oth	er (b))
-	_	Disem- barked	Embarked	Passed Through	Disem- barked	Embarked	Passed Through
1970 1971 1972 1973 1974		6 232 5 127 2 939 2 126 1 188	5 617 4 825 3 311 3 609 1 918	42 379 32 500 24 139 22 383 11 989	7 875 6 547 4 102 3 126 1 727	6 804 6 206 4 338 4 137 2 343	49 990 40 280 30 710 29 465 16 411

- (a) Almost exclusively Port Adelaide.
- (b) Interstate, direct transit and cruise passengers.

#### CIVIL AVIATION

#### Control of Civil Aviation

In Australia, civil aviation is subject to the Australian Air Navigation Act 1920-1974 and to regulations made under the Act. The South Australian Air Navigation Act, 1937 provided for 'the application of Commonwealth Air Navigation Regulations to, and in relation to, air navigation within the State of South Australia'. The regulations under the Australian Act were drawn up to give effect to the 1944 Chicago Convention on Civil Aviation. Regulations based on the resolutions of the Paris Convention in 1919 were no longer adequate in the years after the 1939-45 War because of the immense wartime development of aerial transport.

The present regulations, administered by the Department of Transport, cover the registration of aircraft and the issue of certificates of airworthiness; the licensing of aircraft services, aircraft operating crews, aerodromes, and flying training schools, and the rules of the air. The Department is responsible for the operation of Air Traffic Control and has assumed responsibility for co-ordination of Search and Rescue operations.

Under the Australian National Airlines Act 1945-1973 the Australian National Airlines Commission was established and empowered to operate Australian Government-owned air services. The Commission operates under the name Trans-Australia Airlines,

The Civil Aviation Agreement Act 1952 ratified an agreement between the Australian Government and Australian National Airways Pty Ltd to ensure the efficient and economical operation of air services within Australia by eliminating wasteful competition between that company and Trans-Australia Airlines and to rationalise the services of both airlines. The Civil Aviation Agreement Act 1957 was enacted to extend the privileges and obligations of the 1952 Act to the new proprietor of the major private airline after the purchase of Australian National Airways Pty Ltd by Ansett Transport Industries Ltd. The Australian Parliament passed the Airlines Equipment Act in 1958 and this provided for further financial assistance to both airlines for the purchase of new aircraft and empowered the Australian Government to limit the aircraft capacity being provided on competitive routes by these two operators.

The Airlines Agreement approved by the Airlines Agreement Act 1961 consolidated all the arrangements and principles developed by the Government over the past decade for maintaining and securing the competitive airline system and made important arrangements affecting the introduction of new aircraft on Australian domestic routes. The Civil Aviation Agreement Act 1952-1957, amended by the 1961 Act, is now cited as the Airlines Agreement Act 1952-1973.

For reference to international agreements on civil aviation see the Official Year Book of Australia No. 48, and for references to international organisations see Year Book No. 37.

#### Aircraft on Register

The total number of aircraft listed at 30 June 1975 on the Australian register, was 4269. The following table shows figures for registered aircraft based in the South Australia-Northern Territory Region, classified by type of operation.

Aircraft	Based	in	South	Australia-Northern	Territory	Region
			Typ	e of Operation		

	At 30 June					
Type of Operation	1971	1972	1973	1974	1975	
Regular public transport (a)	14 163 124 93	14 178 125 99	13 185 117 103	11 227 121 107	11 247 130 116	
Total	394	416	418	466	504	

- (a) Excludes major airlines servicing interstate routes.
- (b) Includes agricultural work, ambulance, survey and pilot training functions.

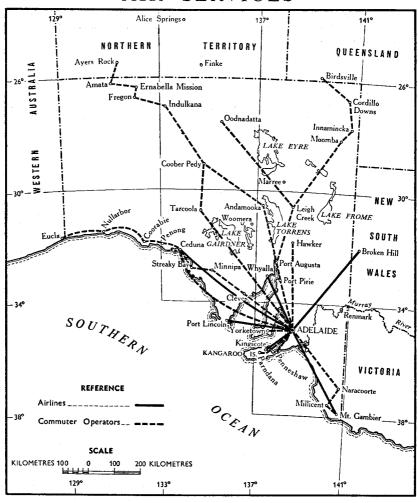
#### General Air Services

Adelaide has no direct links by air with overseas: these are provided through Sydney, Melbourne and Perth. However, it is on the scheduled flights of regular interstate services from Sydney, Melbourne, Perth, Canberra and Darwin.

Adelaide is also the terminus for intrastate services. Regular connections to Ceduna, Kingscote, Mount Gambier, Port Lincoln and Whyalla are provided by Ansett Airlines of South Australia.

Since 1966-67, when the Australian Government approved introduction of commuter services in country areas, there has been a significant increase in regular air services between country towns and areas which were either not served by the major airlines or had no direct air service with Adelaide or the nearest major provincial city. Such services usually utilise single or twin engined aircraft and operate to fixed and published time-tables.

# SOUTH AUSTRALIA AIR SERVICES



The first commuter service in Australia, between Adelaide and opal fields at Andamooka and Coober Pedy, commenced during 1966-67. This service was later extended to Ayers Rock, and now also services a number of remote localities *en route*. The extent to which commuter services have grown in recent years can be seen from the map on page 574, which also shows intrastate airline services.

The next table shows adult passenger single air fares, in force at 15 March 1976, between Adelaide and selected Australian cities.

#### Passenger Air Fares, Adelaide to Selected Australian Cities

Deture a Adeleide and	Adult, Sir	ngle Fare (a)
Between Adelaide and:	Economy Class	First Class
	\$	\$
Alice Springs	78·10	97.60
Brisbane (b)		136.50
Broken Hill		33.60
Canberra (c)	67·10	83.90
Darwin	146.90	183-60
Hobart (d)	74.80	93.50
Melbourne		53.00
Perth		149-90
Sydney	69.90	87.40

<sup>(</sup>a) Fares at reduced rates are applicable to children under 15 years of age, to students and to groups of fifteen persons or more travelling together.

#### Civil Aviation Accidents

In South Australia, during the ten-year period from 1965-66 to 1974-75, there were thirty-five civil aviation accidents involving casualties and these resulted in the death of sixty-one persons and injury to seventeen. These figures exclude parachutists killed in contact with earth after an uninterrupted fall.

Eight of the accidents occurred in gliding, nineteen in private flying, three in training and five in charter operations. Forty-one of the deaths occurred in private flying, sixteen in charter work, three in gliding and one in training operations. There was no accident involving casualties in regular public transport operations.

<sup>(</sup>b) Via Melbourne or Sydney. (c) Either direct or via Melbourne or Sydney.

<sup>(</sup>d) Via Melbourne.

#### Passengers and Freight Carried

The number of passengers and the tonnage of freight carried on civil airlines in South Australia has more than doubled on both interstate and intrastate services during the last ten years. Details of movements at principal airports for the last five years are shown in the following table. A full list of Government and licensed aerodromes in South Australia appears on page 387.

Principal Airports, South Australia
Passengers, Freight and Aircraft Movements

	-				
Airport	1970-71	1971-72	1972-73	1973-74	1974-75
			PASSENGERS	(a)	
Adelaide (b) (c)	1 023 536	1 050 104	1 156 808	1 376 891	1 425 860
Kingscote	51 135	47 993	48 609	59 107	61 121
Port Lincoln	. 42 429	43 648	49 758	60 956	61 737
Woomera		17 719	15 564	14 209	14 032
Whyalla	30 204	31 063	32 662	39 454	41 267
Mount Gambier	22 086	21 890	24 958	29 464	30 148
		Fr	EIGHTTON	NES(d)	
Adelaide (b) (c)	14 408	14 617	14 469	18 549	18 957
Kingscote		129	136	151	142
Port Lincoln	133	123	119	124	. 121
Woomera	233	210	168	99	90
Whyalla	120	112	122	129	133
Mount Gambier	95	112	109	101	98
		Airc	raft Move	ments (e)	
Adelaide (c)	21 918	21 780	22 659	24 351	24 225
Kingscote	1 584	1 455	1 745	1 992	2 081
Port Lincoln		1 382	1 742	2 234	2 325
Woomera		608	536	474	458
Whyalla		1 106	1 188	1 378	1 432
Mount Gambier		1 251	1 257	1 398	1 567

 <sup>(</sup>a) Total of embarkations and disembarkations.
 (b) Figures of passengers and freight movements are overstated to the extent of through traffic transferring between flights.
 (c) Includes Edinburgh Airfield.
 (d) Total of freight loaded and unloaded.
 (e) Total of arrivals and departures.

#### 10.5 COMMUNICATION

Before 1 July 1975, postal, telegraph and telephone services in Australia were controlled by the Postmaster-General through the Postmaster-General's Department. In performing its functions, the Department worked in close co-operation with three important agencies: the Overseas Telecommunications Commission, which is responsible for establishing, maintaining, and operating public cable and radio telegraph services with overseas countries and ships at sea; the Australian Broadcasting Control Board, which ensures the provision of services by broadcasting stations and television stations in accordance with plans prepared by the Board; and the Australian Broadcasting Commission, which controls the activities of the National Broadcasting Service and the National Television Service.

In February 1973 a Commission was established to conduct an inquiry into what changes, if any, should be made in the organisation, administration and operations of postal and telecommunication services. In their Report,

presented in April 1974, the Commissioners recommended establishment of separate postal and telecommunication corporations independent of the jurisdiction of the Public Service Board.

As a result of the Government's acceptance of this recommendation the Australian Telecommunications Commission and the Australian Postal Commission took over from the Australian Post Office on 1 July 1975 under the provisions of the Telecommunications Act 1975, the Postal Services Act 1975, and the Postal and Telecommunications Commissions (Transitional Provisions) Act 1975.

#### POSTAL. TELEGRAPH AND TELEPHONE SERVICES

The Australian Telecommunications Commission has responsibility for telecommunication services within Australia. On commencement, the Commission had approximately 3.5 million telephone subscribers, net assets of \$4 000 million, a staff of 88 600 and a projected budget for 1975-76 of \$1 900 million.

The Australian Postal Commission commenced with a staff of 35 000. The Commission's aim is to provide a fast and efficient postal service at the least possible cost to standards which reasonably meet the needs of the Australian community. Each week day the Commission services about 4.5 million delivery points, and distributes 8.7 million articles.

The information that follows refers to periods before 1 July 1975 when the postal, telegraph and telephone services in Australia were under the control of the Postmaster-General pursuant to the provisions of the Post and Telegraph Act 1901-1974. A detailed history of Posts, Telegraphs and Telephones was included on pages 469-70 of the South Australian Year Book 1967.

As a result of Federation all the former colonial post and telegraph services were taken over by the Australian Government on 1 March 1901. In 1901 there were 713 post offices operating in South Australia and the Northern Territory, with 1 831 telephone services connected. At 30 June 1975 there were 761 post offices and 311 804 telephone services in operation.

Details of post offices and the number of persons employed in postal services in South Australia and Northern Territory for the years 1971 to 1975 are given in the following tables.

Post Offices: South Australia and Northern Territory
Number at 30 June

Particulars	1971	1972	1973	1974	1975
Post Offices: Official Non-official Telephone Offices	175 685 83	175 651 83	171 650 70	171 615 64	171 590 61
Total	943	909	891	850	822

Non-official post offices are conducted by persons who are not members of the Australian Public Service and who receive an allowance based on business transacted—in many instances this type of business is conducted in conjunction with some other business activity.

Post Offices: Employment, South Australia and Northern Territory(a)

At 30 June

Persons Employed	1971	1972	1973	1974	1975
Direct employees:					
Permanent officers Temporary and exempt	8 582	8 831	9 178	9 622	9 847
employees	2 013	2 007	2 099	2 299	2 276
Total	10 595	10 838	11 277	11 921	12 123
Other:  Non-official and semi- official postmasters and postmistresses Persons exclusive of post- masters employed at non-	688	654	626	624	590
official offices	214 83 257	202 71 256	192 68 308	190 64 295	190 61 289
Total	1 242	1 183	1 194	1 173	1 130
Total all employees	11 837	12 021	12 471	13 094	13 253

<sup>(</sup>a) 'Direct Employees' are full-time or part-time staff directly under the control of the Postmaster-General's Department while 'Other' employees include staff engaged, either full-time, or part-time, under contract or in return for payment appropriate to work performed.

#### Receipts and Payments

The Post Office maintains a system of financial and management accounts, known as its commercial accounts, which are quite distinct from the cash accounts maintained to meet Treasury requirements. The cash accounts record actual cash receipts paid into, and cash payments made from, the Post Office Trust Account and take no note of outstanding liabilities or of amounts due but not received at the end of the financial year.

Post Office Trust Account: Cash Receipts
South Australia and Northern Territory

Year	Postal	Telephone	Telegraph	Proceeds of Sales	Recoverable Works	Inter- national Services	Total
				\$,000			
1970-71	15 847	43 333	1 988	675	4 815	68	66 727
1971-72	18 309	50 820	2 342	738	4 555	233	76 998
1972-73	19 227	58 306	2 569	773	4 699	230	85 804
1973-74	21 298	68 208	2 963	744	4 874	350	98 436
1974-75	25 128	83 406	3 587	855	5 272	285	118 533

Capital expenditures are included below with all other cash payments. Separate details of capital expenditures, for either Post Office purposes or other authorities, are not available.

Post Office Trust Account: Cash Payments South Australia and Northern Territory

Year	Salaries and Wages	Material	Carriage of Mail by Contractors	Buildings, Sites and Properties	Accommo- dation Services	Other Adminis- trative Expenses	Total
				\$'000			
970-71	 44 671	18 981	1 340	5 593	2 423	3 766	76 774
971-72	51 636	19 521	1 293	10 729	2 677	4 308	90 163
972-73	60 649	24 304	1 238	7 675	2 885	4 922	101 674
973-74	75 150	26 649	1 297	6 289	3 410	5 710	118 505
974-75	96 608	30 936	1 450	5 762	3 700	7 037	145 492

#### Postal Articles Handled

Details of articles handled by the Postmaster-General's Department in South Australia and the Northern Territory during the years 1970-71 to 1974-75 are shown in the following table.

Postal Articles Handled, South Australia and Northern Territory

Year	Standard Articles (a) (b)	Non-standard Articles (a) (c)	Parcels (d)	Registered Articles	All Articles
Posted for delivery:					
Within Australia;			'000		
1970-71	. 194 852	17 123	1 770	754	214 499
1971-72	. 200 023	18 897	1 738	660	221 317
1972-73	. 203 236	18 317	1 888	606	224 048
1973-74	. 209 303	21 095	1 884	579	232 860
1974-75	. 186 909	25 967	1 642	589	215 107
Beyond Australia;					
1970-71	. 9 675	1 063	84	85	10 908
1971-72		690	92	74	9 986
1972-73	. 9 619	787	93	85	10 584
1973-74	. 4 517	318	85	79	4 999
1974-75	. 4 453	316	82	89	4 940
Received from beyond Australia:	d				
1970-71	. 5 871	2 202	104	35	8 211
1971-72	. 6 692	2 293	94	36	9 114
1972-73	. 5 745	1 731	85	30	7 590
1973-74	. 5 405	1 876	98	32	7 411
1974-75	. 6 569	2 288	110	36	9 003

<sup>(</sup>a) Includes Certified and Messenger Delivery mail. (b) Before 1974-75 includes all letter form articles, (c) Before 1974-75 includes only newspapers and packets. (d) Includes registered parcels.

#### Money Orders and Postal Orders

The value of money orders and postal orders issued in 1944-45 amounted to \$3 128 000 and \$1 801 000 respectively; in 1974-75 the corresponding values were \$18 303 000 and \$8 933 000. Total commission charged on money orders issued in 1974-75 amounted to \$302 180. The fee on postal orders issued in 1974-75 amounted to \$324 000.

The value of money orders and postal orders paid in 1944-45 amounted to \$2 995 000 and \$1 072 000 respectively; in 1974-75 the corresponding values were \$15 844 000 and \$7 457 000.

### Money Orders Issued and Paid South Australia and Northern Territory

	Issued For Payment						Paid, Having Been Issued				
Year	Order		Within A	Australia Beyond Australia		Within Australia		Beyond Australia			
		Offices	Number	Value	Number	Value	Number	Value	Number	Value	
		Number	'000	\$'000	'000	\$'000	'000	\$'000	'000	\$'000	
1970-71	٠.	547	665	14 651	57	612	676	16 530	23	453	
1971-72		540	410	12 226	61	716	395	11 473	22	550	
1972-73		541	386	12 375	59	723	361	11 548	20	510	
1973-74		534	337	13 138	57	726	317	12 184	18	438	
1974-75		529	336	17 547	41	755	308	15 333	15	511	

## Postal Orders Issued and Paid South Australia and Northern Territory

Year	Postal Order			Postal Orders Paid		
1 cai	Offices	Number Value		Number	Value	
	Number	'000	\$'000	'000	\$,000	
1970-71	877	2 432	7 248	1 808	5 917	
1971-72	824	2 518	8 948	1 945	7 614	
1972-73	822	2 364	9 059	1 888	7 755	
1973-74	814	2 305	9 660	1 869	8 075	
1974-75	762	2 026	8 933	1 647	7 457	

#### Telegraph System

Australia's telegraph service, known as TRESS (Teleprinter Reperforator Switching System) was first introduced in South Australia in 1959, before being extended to the other States. This system, using teleprinters and automatic switching apparatus, has eliminated the intermediate handling of telegraph traffic, resulting in greater speed and economy.

Another telegraph service known as TELEX has been available in South Australia since 1957. TELEX is a telecommunications system, similar to the telephone network, using teleprinter machines and providing a printed record of every message. Subscribers are provided with a teleprinter in their own premises and may be connected through the teleprinter exchange with other subscribers anywhere in Australia and in more than 100 overseas countries. At 30 June 1975 there were 1 657 subscribers in South Australia. The number of telegrams dispatched and received, and some information on the operations of TELEX during the years 1970-71 to 1974-75, are shown below.

Telegraph Services, South Australia and Northern Territory

	Teleg	grams	Teleprinte	er Exchange
Year	Dispatched within Australia	Dispatched beyond Australia	Sub- scribers	Number of Calls (a)
	'000	'000	Number	'000
1970-71	1 990	149	870	1 790
1971-72		154	1 002	2 075
1972-73		142	1 175	2 466
1973-74	1 968	160	1 438	2 909
1974-75	1 751	159	1 657	3 661

<sup>(</sup>a) Includes official Post Office traffic.

The Post Office picturegram service is used to send and receive photographs to and from other parts of Australia and overseas. Photographs of documents, X-rays, and other matter capable of being photographed can be transmitted by this service.

The Post Office also provides a Datel service for the transmission of digital data between computer systems over private lines or the ordinary telephone network. The data are converted into a form suitable for transmission over a telephone type circuit by a 'modulator/demodulator' unit known as a 'Modem'. Before data are presented to the computer or terminal they are restored to their original form.

#### Telephone Services

The Post Office provides subscriber services, trunk line circuits and automatic telephone exchanges. There has been a continuous growth in these facilities and at 30 June 1975 there were 2 829 trunk line channels and 351 country automatic telephone exchanges in the State. There are sixty automatic exchanges in the Adelaide Telephone District. From 1 September 1975 the normal charges for selected telephone services are as follows:

Installation charge for a new telephone service is \$120. Annual rental charges are based on the facilities provided; where continuous exchange facilities exist the charge for a non-business service is \$85 or in the case of pensioners \$56.67, paid half-yearly in advance. The corresponding rental charges to subscribers with non-continuous exchanges are \$40 and

\$26.66 respectively. Annual rental charges for continuous exchange and non-continuous exchange business services are \$120 and \$50 respectively. Approximately 97 per cent of exchanges are now continuous.

Private calls between subscribers within a single telephone zone, and between subscribers in adjoining zones, are charged at a 'local call' rate of 9 cents per call. The corresponding charge for calls from public telephones is 10 cents. Trunk call rates, which vary according to duration and distances, are charged for calls between non-adjoining telephone zones: lower rates are charged for calls between 6 p.m. and 8 a.m.

A Post Office objective is the establishment of a nationwide subscriber to subscriber direct trunk calling system known as subscriber trunk dialling (STD). The provision of STD facilities at telephone exchanges in South Australia has increased rapidly since its introduction in January 1967 and at 30 June 1975 STD facilities were available to approximately 213 000 subscribers in the Adelaide Telephone District and about 44 000 country subscribers for two-way contact with selected exchanges in New South Wales, Victoria, Queensland, Western Australia and Tasmania. In addition either one-way or two-way direct dialling between a number of other country exchanges and Adelaide was available to approximately 8 500 country subscribers.

Because approximately 60 per cent of trunk calls originate in country areas, directed either to the capital city or to other country exchanges, great benefit will accrue when all country exchanges are linked with the STD system. However, many years will elapse before the majority of exchanges can be connected because of the amount of work and the complex equipment involved.

#### Telephone Services, South Australia and Northern Territory

	A	Teleskana			Telepi	one Service	s		
	At June	Telephone Exchanges	Ordinary Exchange	Duplex	Party Line	Private Branch Exchange	Public Telephones	Total	-Trunk Line Channels in Service (a)
1971		706	218 113	2	1 172	29 075	2 968	251 330	2 053
1972		698	225 325	2	1 097	32 168	3 016	261 608	2 291
1973		690	239 467	2	995	35 178	3 045	278 687	2 378
1974		674	257 146	2	915	37 140	3 097	298 300	2 726
1975		670	270 036	2	870	37 818	3 078	311 804	2 829

<sup>(</sup>a) Excludes trunk junctions.

All metropolitan and outer metropolitan services are operated through automatic exchanges, whereas at 30 June 1975, 66 000 country services were automatic and 17 000 services were manually operated. Metropolitan and outer metropolitan services totalled approximately 229 000 and of these 164 000 were non-business. In the country, business telephone services accounted for the large share (about 55 per cent) of services.

#### RADIO AND TELEVISION SERVICES

Details of radio and television stations licensed in South Australia at 30 June in the years 1971 to 1975 are shown in the following table.

## Radio and Television Stations, South Australia At 30 June(a)

Radio Communication Stations	1971	1972	1973	1974	1975
Broadcasting: National	9	10 8	10	10 8	10 8
Television: National	4 5	4 5	4 5	6 5	6 5
Transmitting and receiving: Fixed:					
Aeronautical	5 173 174	168 151	171 154	185 153	190 195
Land; Aeronautical Base stations for mobile	28	29	35	38	40
services	1 027 21 62	1 133 25 69	1 275 24 66	1 448 25 72	1 521 25 78
Mobile	12 508	13 773 1	15 437 1	17 332 1	19 219 1
Amateur	752	740	748	<b>7</b> 78	789
Fixed	<u>14</u>	<u>17</u>	19 10	20 10	<del></del>
Total stations	14 790	16 133	17 967	20 091	22 111

<sup>(</sup>a) Excludes stations in Northern Territory.

Note: A fixed station is established at a fixed location for the exchange of radio messages with other fixed stations whereas a land station is established at a fixed location for the exchange of radio messages with mobile stations. An outpost station is established in an outback area and communicates with control stations operated by such organisations as the Royal Flying Doctor Service. A space service is a radiocommunication service between earth stations and space stations, between space stations, or between earth stations when signals are retransmitted by space stations, or transmitted by reflection from objects in space.

Before 17 September 1974, the Broadcasting and Television Act required that radio and television receivers be licensed: a person who owned both a radio and a television receiver at the one address was issued with a combined receiving licence while a person owning only one type of receiver was issued with a radio listeners' licence or a television viewers' licence. From 17 September 1974 these licensing requirements were abolished.

Further information on radio and television services is contained in Part 6.4 Culture and Recreation.

#### OVERSEAS TELECOMMUNICATIONS SERVICES

The Overseas Telecommunications Commission (Australia) was established under the Overseas Telecommunications Act 1946. The Commission, in association with the Australian Telecommunications Commission in Australia and with telecommunication authorities in overseas countries, provides telecommunication services between Australia and other countries. These services are provided through high-frequency radio, coaxial submarine cable, and satellite communication systems, and include international public message telegraph, telephone, telex, phototelegraph and leased teleprinter and telephone-type services. A service providing computer to computer high-speed data transfer is also available to some countries, while international television programs are provided by means of satellite communication facilities with countries having access to an earth station operating with an Australian station. In addition, the Commission operates the Australian coastal radio services for communication with ships at sea in Australian waters, and high-frequency radio services for communication with ships in any part of the world.

Earth stations at Carnarvon in Western Australia and at Moree in New South Wales operate through the INTELSAT IV series of communications satellites.

In February 1970 Australia's third earth station near Ceduna was opened. This station faces westward to INTELSAT III which is located over the Indian Ocean and can carry all types of communications traffic: subject to establishment of earth stations in relevant countries it provides facilities for direct links with Europe, Africa, India, most of South-East Asia, and the western part of Japan. The first direct broadcast via this satellite was received in Australia from the United Kingdom on 20 February 1970.

Details of the overseas telecommunications services and traffic are published in various issues of the Official Year Book of Australia, e.g. No. 57, 1971, pages 370-2.

PART 11

## **PUBLIC FINANCE**

#### 11.1 STRUCTURE OF PUBLIC FINANCE

The collection of public revenue and the expenditure of public money in South Australia are the responsibility of four groups of authorities: (i) Australian Government; (ii) South Australian Government; (iii) public corporations; and (iv) local government.

The power to raise revenue from taxation is vested in the various governments and authorities by Acts of Parliament. Other revenue comes from the proceeds of the sale of goods and services to the public and to other governments and authorities. A major proportion of the revenue of the State Government, and a smaller proportion of the revenue of local government authorities and some public corporations is derived from grants from other levels of government. A further source of funds is the loan market; government securities are issued for loan raisings in Australia and overseas.

Authorisation for expenditure by Australian and State Government departments is given by Appropriation Acts or by Special Acts of their respective Parliaments. Each State public corporation derives its authority for expenditure from the provisions of the specific Act under which it has been established. The Local Government Act, 1934-1975 contains sections relating to local government expenditure. The following sections of this part provide some details of the financial transactions of the government sector in South Australia. Special attention is given to transactions within the State Government budget, transactions

of a number of public corporations, and transactions of all local government authorities. In addition, details of some Australian Government expenditures are included.

#### **Australian Government Transactions**

Reference is made to the revenue and expenditure of the Australian Government only to the extent that it affects the finances of the State Government. As indicated in more detail below, not all of the transactions listed relate directly to the State budget; many of the items are negotiated wholly through State Trust Funds. The transactions which are included represent only a small proportion of total expenditure by the Australian Government within South Australia. A more detailed analysis of Australian Government finance may be obtained from the Official Year Book of Australia.

#### State Government Accounts

Statistics relating to the State Government Budget are derived from accounts prepared by the Treasurer each year and included in the Report of the Auditor-General of South Australia. These accounts, which are on a cash basis, cover the Consolidated Revenue Account which in general terms is the current account of the Government, and the Loan Fund through which is handled all money raised by public borrowing; the receipt and disbursement of some special purpose Australian Government grants are also handled through these accounts.

State Government Budget receipts include (in addition to loan raisings) taxation, proceeds of sale of goods and services by trading undertakings, some of the grants made by the Australian Government, fees, rents, recoups and other sundry items. State Government disbursements are made for capital works, for provision of services (such as health, education and water supply), for general administrative expenses, and for interest and redemption payments.

The State Government Budget excludes many transactions negotiated through State Government Deposit and Suspense Accounts (including working accounts) and Trust Funds. The volume of such transactions is considerable. For example, road works financed through Road Maintenance Act charges and by Australian Government grants are handled through working accounts, as are the operating costs and revenue of the Woods and Forests Department.

Some idea of the framework of the various funds may be obtained from the following table showing sources and disposal of funds in which the balances of Trust Funds and of Departmental Accounts appear.

## Government of South Australia, Sources and Disposal of Funds at 30 June 1975

Sources and Nature of Funds	\$'000	
Public Debt:		
Securities Current at 1 July 1974	1 481 337	
New Loans Raised during 1974-75	282 544	
	1 763 881	
Less: Securities Redeemed and Converted	208 548	
		4 555 000
Public Debt at 30 June 1975		1 555 333

## Government of South Australia, Sources and Disposal of Funds at 30 June 1975 (continued)

Sources and Nature of Funds (continued)		\$'000	
Other Interest Bearing Indebtedness: Trust Fund Balances			20 866
Liabilities to Australian Government; Housing Agreements			343 607 86 607
Non-Interest Bearing Indebtedness: Trust Fund Balances			24 447 25 887
			2 056 746
Disposal of Funds			
Loan Account: Total of Loan Works at 1 July 1974 Payments during 1974-75		1 372 502 211 201	
	-	1 583 703	
Less: Repayments	62 198 25 149 72 927	1 200 700	
Loan Works Account Balances at 30		160 274	
June 1975			1 423 429 130 000
Deficit at 1 July 1974		536 14 934	
1974		14 398	
Receipts for Year	828 985 820 601		
Deficit for Year Deficit at 30 June 1975 Rural Industry Assistance Agreement:		8 384	<b>—22</b> 782
Rural Industry Assistance Agreement: Advances to Primary Producers			11 550
Housing Agreements:  Advances to SA Housing Trust  Advances to Home Builders Accounts		191 959 151 649	
Natural Gas Pipeline Agreement:	-		343 608
Advances to Natural Gas Pipelines Authority			9 375
Railway Standardisation and Equipment: Improvements and Advances			16 531
Other Agreements			49 804
Cash at Bank		-	95 231
		_	2 056 746

<sup>(</sup>a) Amount of debt to be taken over by Australian Government (\$26 000 000) and Capital Works Grant, in lieu of loan raising (\$46 927 000). (b) Not represented by assets: debt to be taken over by Australian Government. (c) Pursuant to Section 96 of Australian Constitution on account of the period to 30 June 1973.

#### **Public Corporation Accounts**

Most of the details included under this classification are based on the Auditor-General's annual reports prepared for a number of public corporation business undertakings, including those engaged in banking. Information is given from both revenue statements and balance sheets.

#### Local Government Accounts

Details included for local government authorities to 1967-68 are based on cash statements of receipts and payments: from 1968-69 onwards the details are based on annual statements prepared on an income and expenditure (accrual) basis in accordance with the 'Local Government Accounting Regulations, 1967'. Details of loan raisings are based on returns furnished separately.

#### Consolidated State and Local Government and Public Corporations Accounts

Any analysis of financial transactions of the Government sector would be incomplete without a comprehensive consolidation of all levels and funds of Government. Such data is released in the *Public Authority Finance* bulletin published by the Australian Statistician: this bulletin shows net receipts and outlays of the Australian Government and each State separately and of the Australian Government combined with all States. The figures are net and consolidated: net figures are those for which expenditures within a given classification have been reduced to the extent of any relevant receipt (and *vice versa*); and consolidated figures are those for which inter-authority, inter-level and interfund transactions are eliminated on consolidation of those authorities, levels and funds.

The tables which follow show figures on a consolidated net basis for State and local government and major public corporations in South Australia for the four years to 1973-74.

State and Local Government Authorities and Public Corporations South Australia, Receipts and Financing Items

Particulars	1970-71	1971-72	1972-73	1973-74
Do take	\$ million			
Receipts:		*	illon	
Taxes, fees, fines, etc	101-3	139-9	168∙8	214.9
Income from public enterprises	44.5	42.5	39∙5	35.0
Property income;				
Interest	16·1	20.0	21.3	26.0
Land rent, royalties	3.4	3⋅5	3.9	4.3
Total property income	19-5	23.5	25.2	30.3

State and Local Government Authorities and Public Corporations
South Australia, Receipts and Financing Items (continued)

Particulars	1970-71	1971-72	1972-73	1973-74
Grants from the Australian Government:	\$ million			
For current purposes For capital purposes	178·9 65·4	195·0 69·7	240·6 80·6	291·8 105·3
Total receipts	409·6	470-6	554.7	677-3
Financing items:  Net borrowing;  Local authority and public				
corporation securities Other general government	24.8	23.3	23.6	28.2
securities	0.6	0.6	5.4	4.0
For loan works purposes.	45.1	76.2	83.4	61.3
Other	27.3	2.1	2.4	46.1
funds	2.7	3.0	5.2	0.4
Cash and bank balances .	<b>-3·1</b>	<b>−5·3</b>	-26.7	22.9
Security holdings Other funds available (including	-8.4	0.4	-0.2	4.4
errors and omissions)	19.7	23.2	27.2	30.4
Total financing items	108.7	123.5	120.3	151-9
Total funds available	518·3	594·1	675.0	829-2

# State and Local Government Authorities and Public Corporations South Australia, Outlay

Particulars	1970-71	1971-72	1972-73	1973-74
	\$ million			
Final consumption expenditure Gross capital formation:	198.5	238· <b>5</b>	286.4	378∙6
Increase in stocks	1.3	0.5	0.5	1.8
Expenditure on new fixed assets	197.3	213.2	228.7	262.2
Expenditure on existing assets (net)	4.6	9.9	12.7	33.7
Total gross capital formation	203.2	223.6	241.9	297.8

State and Local Government Authorities and Public Corporations
South Australia, Outlay (continued)

Particulars	1970-71	1971-72	1972-73	1973-74	
Transfer payments:	\$ million				
Interest	89·8 6·2 0·7	98·8 9·2 0·8	104·9 11·6 0·6	110·9 12·6 0·6	
purposes	2.8	3.2	6.7	5.6	
Total transfer payments	99.5	112.0	123.8	129.7	
Net advances: To the private sector To public financial enterprises	5·5 11·6	8·7 11·3	8·2 14·7	4·6 18·5	
Total net advances	17·1	20.0	22.9	23·1	
Total outlay	518.3	594·1	675.0	829-2	
Current outlay	298·0 220·3	350·5 243·6	410·2 264·8	508·3 320·9	

# 11.2 AUSTRALIAN-STATE GOVERNMENTS FINANCIAL RELATIONS

The Commonwealth of Australia Constitution Act and the 1927 Financial Agreement represent significant events in financial relations between the Australian and State Governments. Under the former, the States surrendered the right to levy customs and excise duties which passed exclusively to the Australian Government and under the latter, the Australian Government became the borrowing agent for the States. Further details appear on page 537 of the South Australian Year Book 1972.

Since Federation the Australian Government has made payments of various descriptions to the States. Before the 1939-45 War, Australian Government payments were confined, for the most part, to special grants to assist the financially weaker States and to certain specific purpose grants relating to such matters as Australian Government assistance for roads and contributions under the Financial Agreement.

Since the 1939-45 War there has been a marked increase in the amount and variety of Australian Government assistance to the States. This has reflected, among other things, increases in the range and variety of government activities which have accompanied economic and social developments in this period of rapid growth of the Australian economy; greater participation by the Australian

Government in matters which were previously considered to be the sole responsibility of the States; and the effects of the introduction and continuation of uniform income tax and of other changes on the basic allocation of financial resources between the Australian and State Governments.

There are various ways of classifying Australian Government payments to the States. They may be classified as 'capital' as opposed to 'current' transactions; to general purpose grants compared with payments for purposes specified by the Australian Government; or in accordance with the constitutional authority under which the payments are made. Many of the recently introduced grants have been for specified purposes and instituted under Section 96 of the Constitution.

#### SPECIAL GRANTS

The Constitution provides, in Section 96, for the granting of special financial assistance to the States. Before 1933 financial assistance of varying amounts was granted to South Australia, Western Australia and Tasmania.

In 1933 the Australian Government appointed the Grants Commission, of three members, to inquire into and report upon claims made by any State for a grant of financial assistance and any matters relevant thereto. From 1933 to 30 June 1959 applications were lodged by each of the three States already mentioned. South Australia ceased to be a claimant State from 1 July 1959; and at the Premiers' Conference in June 1968, following a request from Western Australia, it was agreed that (subject to certain considerations) claims by Western Australia would cease after payments in respect of 1967-68 leaving Tasmania as the only claimant State during 1968-69 and 1969-70. Following the Premiers' Conference in June 1970 the Government of South Australia decided to again submit a claim; it did this on 6 July 1970. On 30 September 1971 Queensland also made application for a special grant. In 1974, following the Australian Government's agreement to provide additional financial assistance, Tasmania withdrew from the special grants system.

In September 1974 the Commission recommended a completion grant for South Australia of \$8.5 million in respect of 1972-73 and an advance grant to this State of \$15 million for 1974-75. In June 1975, as part of the agreement to transfer its non-metropolitan railway network to the Australian Government, South Australia again withdrew from the special grants system: as a consequence of this agreement and withdrawal from the special grants system payments totalling \$16 434 000 were made to South Australia. The grants announced by the Commission are authorised by States Grants (Special Assistance) Acts.

#### FINANCIAL ASSISTANCE GRANTS

Financial assistance grants, formerly called tax reimbursement grants, make up the bulk of the assistance provided for general revenue purposes and are determined annually on the basis of an agreed formula.

A discussion of grants applicable before 1970-71 appears on pages 538-9 of the South Australian Year Book 1972. Financial assistance grants applicable for 1970-71 and later years were discussed at Premiers' Conferences between February 1970 and June 1972; further details appear on pages 596-8 of the South Australian Year Book 1975.

At the June 1973 Premiers' Conference it was agreed that from 1 January 1974 the Australian Government would take over full financial responsibility for tertiary education. To make allowance for recurrent expenditures no longer required of the States, deductions of \$111.8 million in 1973-74 and \$229.7 million in 1974-75 were made from financial assistance grants otherwise payable to them; the 1974-75 amounts will be subtracted from the base for calculation of formula grants in 1975-76 and subsequent years.

In May 1975 the Australian Government reached agreement with the Government of South Australia for the transfer of the non-metropolitan railway system in this State to the Australian Government. The Tasmanian Government also agreed to transfer its railway system to the Australian Government. Adjustments were made to the 1974-75 base on which the States' financial assistance grants for 1975-76 were calculated.

At the June 1975 Premiers' Conference the Australian Government agreed to changes in the financial assistance grants arrangements. For 1975-76 a further \$220 million was paid to the States in addition to the financial assistance grants otherwise payable in that year. An amount of \$5.0 million was added to the base grants on which Western Australia's financial assistance grants for 1975-76 was calculated and for subsequent years will be calculated. For the calculation of grants for 1976-77 and subsequent years the 'betterment' factor will be increased from 1.8 per cent to 3.0 per cent.

#### SPECIAL REVENUE ASSISTANCE

From time to time the Australian Government has provided general revenue assistance to the States in addition to that payable under the financial assistance grants arrangements or by way of special grants recommended by the Grants Commission.

A Premiers' Conference was held in February 1975 to discuss special revenue assistance for 1974-75. The Australian Government agreed to provide the States with an additional \$60 million of which South Australia received \$6.6 million. As part of arrangements for the transfer of the non-metropolitan railway network of South Australia and the railway system of Tasmania to the Australian Government, payments classified as special revenue assistance were made to the two States. South Australia received \$10 million and Tasmania \$5 million.

#### CAPITAL GRANTS

At the June 1970 Premiers' Conference the Australian Government undertook to provide a portion of the State's Loan Council programs in the form of capital grants. As a result of the States Grants (Capital Assistance) Act 1970, the Australian Government distributed \$200 million to the States in 1970-71 in the same proportions as their borrowing programs. South Australia's share of this grant was \$27.4 million. This assistance was continued in 1971-72 under the 1971 Act, South Australia's share being \$30.0 million.

As well as increasing the 1971-72 grants and providing for similar grants in 1972-73, States Grants (Capital Assistance) Acts passed in 1972 provided for additional grants by way of capital assistance to the States for government primary and secondary schools during 1971-72 and 1972-73. South Australia's

share of the general works and housing grant for 1972-73 was \$34.1 million and its share of the government primary and secondary schools grant for the same year was \$1.8 million. For 1973-74 South Australia's share of the general works grant, after allowance for Australian Government assumption of full responsibility for tertiary education from 1 January 1974, was \$37.6 million.

In 1974-75 the Australian Government paid \$346 million in capital assistance grants to the States; South Australia's share of this was \$46.9 million.

#### OTHER FINANCIAL ASSISTANCE

In addition to grants under the Financial Agreement, special grants recommended by the Grants Commission, financial assistance grants, special revenue assistance and capital grants, the Australian Government makes payments to the States for many specific purposes, some details of which are given below.

#### Schools

From 1964 the Australian Government has provided grants to assist education and research in the States. Payments during the first three years related to science laboratories in government and non-government secondary schools, training of persons for employment in trade and technical occupations, education in non-university tertiary institutions (colleges of advanced education), and approved research projects. The range of institutions eligible for assistance through these grants was extended in 1967 to include teachers colleges, and in 1968 to include pre-school teachers colleges and secondary school libraries. The States Grants (Independent Schools) Act 1969 extended this assistance further by providing for the payment of per capita grants (in respect of recurrent expenditure) to non-government schools.

On 12 December 1972 the Australian Government established the Interim Committee for the Australian Schools Commission which has advised on the financial needs of government and non-government schools. The Commission itself was established by the Schools Commission Act 1973, which came into effect in December 1973. Since the beginning of 1974, grants have been made to the States for government schools and for non-government schools on the recommendation of the Interim Committee.

The recommendations of the Interim Committee envisaged grants totalling \$693 million to be paid to the States during 1974 and 1975. Recent revisions have increased the grants payable during the two years to \$794 million. The grants are being made for both government and non-government schools according to the following categories: general recurrent grants, general building grants, and grants for science laboratories and equipment, libraries, schools for the handicapped, disadvantaged schools, teacher development, innovatory projects and information programs.

#### Universities

Grants to the States for recurrent expenditure of universities commenced in 1951-52; similar grants for capital works and equipment for universities were introduced in 1958.

The Australian Government assumed full financial responsibility for universities from 1 January 1974. As a result, assistance for the three years 1973 to 1975 was revised to \$1 152.7 million. The Report of the Universities Commission, presented to the Australian Government in May 1975, recommended that the Government make financial assistance to State universities during the three calendar years 1976 to 1978 of \$1 590.0 million, of which \$1 292.3 million is for recurrent purposes and \$297.7 million is for capital purposes.

#### Colleges of Advanced Education

Grants to the States for colleges of advanced education commenced in March 1965. These grants were initially for capital purposes but at the start of the 1967-69 triennium were extended to cover recurrent grants. Total grants for the three calendar years 1973 to 1975 have been set at \$798.7 million. This estimate takes into consideration the decisions of the Australian Government to accept full financial responsibility for tertiary education and the abolition of tuition fees from 1 January 1974.

#### School Dental Scheme

In 1973 agreement was reached between the Australian and State Governments in respect of a program to provide an Australia-wide School Dental Service. The capital costs of providing school dental clinics are borne in full by the Australian Government and operational costs are shared between the Australian Government and the State Governments on a \$3 for \$1 basis. In 1973-74, grants totalling \$7.5 million were paid to the States under this scheme. Payments made to the States in 1974-75 totalled \$18.6 million, of which South Australia received \$3.9 million.

#### Unemployment Relief

In December 1971 the Australian Government announced grants to be spent on activities which create employment in rural areas. The original plan, subject to later review, provided that for the first seven months South Australia would receive \$945 000 but this was increased in February 1972 when the monthly rate of payment to each State was doubled. A further increase was announced in June 1972 when the monthly rate was raised to \$6 million (South Australia's share being \$360 000 a month). In December 1972 further grants were made for the subsequent six months with South Australia receiving an additional \$120 000 a month; grants totalling \$30.35 million were also made for the relief of unemployment in metropolitan areas during the same period. Non-metropolitan unemployment grants totalling \$12 million were paid to the States on a reducing basis during the period July to September 1973 when they were terminated because of an improvement in the overall employment situation. At the February 1975 Premiers' Conference the Australian Government agreed to grant additional assistance to the States for the remaining months of 1974-75. Total payments of \$40.0 million were made in 1974-75 with South Australia's share being \$3.6 million. This money was used to increase the number of employees of State Governments, local governments, public corporations or other bodies; these grants are to continue in 1975-76 on a phasing-out basis.

The Regional Employment Development Scheme was introduced during 1974-75 to create employment opportunities in areas of relatively high unemployment. Payments made to State Governments and public corporations totalled \$8.5 million, South Australia's share being \$1.1 million. In addition grants of \$43.6 million were made to local government authorities—South Australian authorities receiving \$3.6 million.

In total, the Australian Government made grants of \$234.9 million for unemployment relief during the years 1971-72 to 1974-75; of this South Australian authorities received \$20.5 million.

#### Housing

Under successive Australian-State Governments Housing Agreements between 1 July 1956 and 30 June 1971, housing advances determined by the States from within their Loan Council allocations were made by the Australian Government to the States at concessional rates of interest. A new arrangement under the States Grants (Housing) Act 1971 applicable from 1 July 1971 provided that the interest concession be replaced by annual grants payable over a period of thirty years. Total recurrent grants paid during 1971-72 were \$4.2 million. Of the \$7.0 million provided in 1974-75 South Australia received \$1.1 million.

At the June 1973 Premiers' Conference and Loan Council meeting, the arrangements for housing finance were again changed. The arrangements were changed again in 1973-74 to provide for the Australian Government to make special advances to the States under a new Housing Agreement and outside the programs determined by the Loan Council.

## Land Acquisition

The Land Commissions (Financial Assistance) Act 1973 authorised the provision of financial assistance to the States in respect of expenditure by approved State authorities on programs of land acquisition. South Australia was the first State to accept the principles of the Land Commission program and the South Australian Land Commission began operating in 1973-74. Payments to the States in 1973-74 totalled \$11.5 million including a loan of \$8.0 million to the South Australian Land Commission. Payments made by the Australian Government during 1974-75 was \$41.1 million, including \$19.6 million to South Australia: of this \$1.9 million was in the form of grants and \$17.6 million in the form of loans.

#### **Growth Centres**

The Growth Centres (Financial Assistance) Act 1973 provides that the Minister of Urban and Regional Development may approve programs of financial assistance to the States in respect of the development of eleven specified growth centres. Assistance in 1973-74 totalled \$6.5 million including \$4.4 million for the development of Monarto in South Australia. Payments made during 1974-75 for growth centres other than Albury-Wodonga were \$17.5 million. This includes assistance on account of Monarto of \$0.8 million in grants and \$5.0 million in loans.

#### Sewerage

During 1973-74 the Australian Government introduced a program of assistance to the States designed to eliminate the backlog of sewerage works in principal urban areas. Loans of \$27.9 million for capital works were made during 1973-74, South Australia's share being \$1.6 million. Capital works assistance of \$116.9 million consisting of \$32.2 million in grants and \$84.7 million in loans was provided to the States during 1974-75; in addition the Australian Government paid \$0.9 million in the form of grants for current purposes. Payments to South Australia were current grants of \$0.3 million, capital grants of \$1.7 million and loans of \$4.0 million.

#### Urban Water Supply

During 1974-75 an amount of \$4.4 million was advanced to South Australia under the *Urban and Regional Development (Financial Assistance) Act* 1974 to assist construction associated with the Adelaide water treatment scheme.

#### Roads

Grants for road works have been made since 1923, and from 1931 to 1958 were based on a percentage of Australian Government petrol taxation. A new scheme of assistance to the States for roads was established by the Commonwealth Aid Roads Act 1959 in which the Australian Government undertook to provide \$500 million for distribution, according to stated criteria, to the States during the five years to 30 June 1964. The Commonwealth Aid Roads Act 1964 stipulated a sum of \$750 million for distribution to the States during the five years from 1 July 1964. For the five years commencing 1 July 1969 the relevant sum was \$1 252 million. The Australian Government plans to provide \$1 126 million to the States for road expenditure during the period 1974-75 to 1976-77.

## **Urban Public Transport**

The States Grants (Urban Public Transport) Act 1974, and the Urban Public Transport (Research and Planning) Act 1974 authorise the payment of grants up to \$72.9 million to the States as part of a five-year program to assist in the upgrading of urban public transport (including railways).

In 1974 agreement was reached between the States and the Australian Government for two-thirds of the costs of approved urban transport projects in the States to be met by the Australian Government. No funds were made available during 1973-74 but grants of \$45.3 million were paid in 1974-75, South Australia's share being \$6.2 million. The Appropriation (Urban Public Transport) Act 1974 provided for a further \$66.1 million for projects commencing in 1974-75.

For more complete historical and current information on Australian Government financial assistance to the States, reference should be made to the most recent issue of the bulletin 'Payments to or for the States and Local Government Authorities' presented to the Australian Parliament.

Figures in the following table are those which have been published in the latest issue of that bulletin and show the general pattern of Australian Government payments to or for the State of South Australia for 1974-75 and four earlier years. Some amounts shown are repayable to the Australian Government but repayable advances for war service land settlement are not included.

# AUSTRALIAN-STATE GOVERNMENTS FINANCIAL RELATIONS

## Australian Government Payments To or For the States, South Australia

Particulars	1964-65	1971-72	1972-73	1973-74	1974-75
			\$'000		
Financial assistance grants	78 155	158 491	181 430	204 918	261 737
Special grants		7 000	21 000	19 900	39 934
Special revenue assistance		5 929		2 764	16 616
Loan Council borrowings	59 020	92 260	100 554	79 587	99 261
Capital grants	_	30 030	34 074	37 625	46 927
Specific Puri	POSE PAYM	ENTS: REC	CURRENT P	URPOSES	
Sinking fund on State Debt	2 193	3 458	3 689	3 896	4 072
Debt charges assistance		2 991	4 487	5 982	7 478
Schools		1 889	2 529	6 464	19 01
Technical and further education				889	2 639
Universities	3 266	6 676	7 898	19 808	38 06
Colleges of advanced education	_	1 651	2 638	13 518	24 53:
Pre-schools and child care				690	3 23
School dental scheme				1 066	1 700
Community health				597	820
Employment grants		1 620	9 660	941	3 60
Regional employment develop-					
ment	_				1 113
Aboriginal advancement		270	694	1 003	1 50
Local government (Grants					
Commission)					4 774
Other	2 258	5 060	6 530	9 049	10 33
Total recurrent purposes.	7 717	23 615	38 125	63 903	122 88
Specific Pu	RPOSE PAY	MENTS: C	APITAL PU	RPOSES	
Schools	924	2 629	3 805	9 430	19 159
Schools	933	1 130	1 130	2 063	2 800
Colleges of advanced education		2 872	3 639	6 196	12 579
Universities	1 814	1 818	2 697	7 050	7 320
Pre-schools and child care		_		514	2 77:
Hospitals			-	441	3 23
School dental scheme		_		895	2 24
Community health				1 195	1 59
Aboriginal advancement		530	1 046	3 696	4 05
Housing	20 500		500	32 750	56.36
Growth centres		_		4 414	5 82
Land acquisition		-	-	8 000	19 55
Sewerage				1 598	5 75
Rural reconstruction		3 000	6 100	4 300	2 00
Dartmouth Dam			675	950	2 50
Urban water supply					4 40
	14 903	25 500	28 000	31 000	31 88
Roads					6 21
Urban public transport					27.1
	4 851	6 694	5 517	3 907	6 44

#### NATIONAL WELFARE FUND

The States receive, from the Australian Government through the National Welfare Fund, payments in respect of hospital and pharmaceutical benefits and reimbursement of maintenance expenditure on tuberculosis sanatoria.

In South Australia the receipts are paid into the Consolidated Revenue Account. Receipts for the year 1974-75 were hospital benefits \$2 220 000, pharmaceutical benefits \$3 546 000, and tuberculosis reimbursement of maintenance expenditure and surveys \$1 114 000.

#### 11.3 STATE GOVERNMENT FINANCE

State Government accounting in South Australia is on a 'cash' basis. Receipts and payments fall into five main divisions, namely the Consolidated Revenue Account and Loan Fund (which together constitute the budget sector), Special Australian Government Advances, Trust Fund Accounts and Deposit and Suspense Accounts.

#### CONSOLIDATED REVENUE ACCOUNT

This account is credited with receipts from many items of State taxation, fees, licences and charges for services, recoveries of interest and sinking fund, financial assistance grants (originally entitled tax reimbursement grants) and some other Australian Government grants. The account is debited with the cost of revenue collection, legislative and administrative functions, interest and sinking fund on the public debt, provision of education, health, social security and welfare and other services, operation of business undertakings and development of State resources. The resultant balance represents the State's surplus or deficit for the year.

Consolidated	Revenue	A ccount.	South	Australia

Particulars	1939-40	1949-50	1959-60	1969-70	1974-75
			\$'000		
Receipts	25 511 25 837	58 721 59 100	160 555 161 177	338 498 335 578	828 985 820 601
Surplus (+) or deficit (—): Current year Cumulative	-325 +1 999	-379 +3 215	622 3 376	+2 920 4 579	+8 384 +22 782(a)
	Per Head	l of Populat	tion		
			Dollars		
Receipts	42·72 43·28	85·50 86·05	171·99 172·65	293·06 290·53	672·71 665·91

<sup>(</sup>a) After receipt of \$14 934 000 special grant from Australian Government.

#### Sources of Revenue

The sources of revenue for the financial years 1971-72 to 1974-75 were as follows:

## Consolidated Revenue Account: Sources of Revenue, South Australia Total Revenue

Source of Revenue	1971-72	1972-73	1973-74	1974-75
	1.	\$'(	000	
Net taxation (a)	97 476	120 474	156 903	214 982
Business undertakings (b)	101 183	108 251	126 120	153 586
Territorial: Land sales, rents, etc	3 250	3 238	3 532	3 299
Other:				
Interest and exchange	29 577	31 335	35 312	40 300
Fees, fines, rents, etc	47 892	56 745	90 145	104 463
Australian Government grants	175 866	200 824	229 955	312 355
Total	455 245	520 866	641 967	828 985

## Per Head of Population

	Dollars					
Net taxation (a)	82·35	100·76	129·58	174·46		
	85·48	90·54	104·16	124·63		
	2·75	2·71	2·92	2·68		
Interest and exchange Fees, fines, rents, etc	24·99	26·21	29·16	32·70		
	40·46	47·46	74·46	84·77		
	148·57	167·97	189·92	253·47		
Total	384-60	435.65	530-20	672.71		

## Proportion of Total Revenue

		Per	cent	
Net taxation (a)	21·41 22·23 0·71	23·13 20·78 0·62	24·44 19·65 0·55	25·93 18·53 0·40
Interest and exchange	6·50 10·52 38·63	6·02 10·89 38·56	5·50 14·04 35·82	4·86 12·60 37·68
Total	100.00	100-00	100.00	100.00

<sup>(</sup>a) Some items and amounts differ slightly from State Treasury classifications.

<sup>(</sup>b) For details see table on page 604.

#### Receipts and Outlay

The following two tables present a summary of transactions from Consolidated Revenue Account. The purpose classification shown is based on the purposes of government recommended in the United Nations System of National Accounts. It is intended to bring together outlays with similar objectives to reveal more fully the broad purposes of public sector spending. The distinction between receipts and outlay corresponds to that embodied in the economic type classification which is designed to categorise transactions in a way which facilitates a study of the impact of government transactions on the economy. Dissections of the totals shown for education, health and social security and welfare are given in Parts 6.2, 6.5 and 6.6 of this publication. For further details of the classification see *Public Authority Finance—State and Local Authorities* 1973-74 (Ref. 5.43) published by the Australian Statistician.

#### Consolidated Revenue Account: Receipts and Outlay, South Australia, 1974-75

	(	Outlay (a) (b	)		
Purpose	Purchases of Goods and Services			Total (Including Other)	Total Receipts (a)
a			\$'000		
General public services: General administration n.e.c. Law, order and public safety	33 909 47 996	23 326	7 769 5 643	26 323 44 381	1 415 4 884
Other general public services  Education Health Social security and welfare	196 107 120 587 9 901	11 6 634 5 472 1 709	2 130 25 376 1 050	14 212 745 108 568 21 285	22 281 4 704 1 917
Housing and community amenities: Housing Community and regional development Protection of the environment	398 1 199 10 277	- <sub>7</sub> 5	158 41 17 729	1 705 1 526 7 096	85
Community amenities n.e.c	160 6 270	1 245	17 <b>7</b> 99	143 10 446	138
Economic services:  General administration, regulation and research Agriculture, forestry and fishing Mining, manufacturing and construction Electricity, gas and water Transport and communication;	7 014 11 985 5 537 20 662	50 39	1 344 2 613 1 776 29 582	5 724 11 904 4 762 —8 105	1 265 2 907 2 472
Rail (non-urban)	63 727 223 7 185	=	47 239 10 889	47 041 24 583 —3 704	30 182
Urban transit systems (including urban rail) Other transport and communication Other economic services Other purposes		28 497	2 891 461	24 027 200 3 591 (c)133 031	9 818 — 1 554 ( <i>d</i> )602 788
Total	556 554	16 054	157 507	663 094	686 410

 <sup>(</sup>a) Charges for goods and services supplied have been excluded from receipts and deducted in calculating outlay.

<sup>(</sup>b) Incorporates revenue and operating expenses of public trading enterprises.

<sup>(</sup>c) Includes interest of \$98 649 000.

<sup>(</sup>d) Includes general purpose inter-authority transfers from the Australian Government of \$329 290 000. Also includes taxation.

Space limits the information which can be given for separate receipts and outlay items. Other significant outlay items and their values for 1974-75 are: interest (\$98 649 000) repayments of Australian Government advances (\$19 070 000) intra-sector transfers (\$14 354 000) and inter-fund transfers (\$30 121 000). Major receipt items and their values for 1974-75 are: general purpose inter-authority transfers (\$329 290 000), interest (\$40 313 000), taxation (\$232 195 000) and inter-fund transfers (\$26 226 000).

## Consolidated Revenue Account: Outlay, South Australia (a)

Purpose	1971-72	1972-73	1973-74	1974-75
		<b>.</b> \$'	000	
General public services:				
General administration n.e.c	13 757	15 757	19 775	26 323
Law, order and public safety	21 183	<b>2</b> 4 998	31 738	44 381
Other general public services	20	22	14	14
Education (b)	126 772	145 950	194 097	212 745
Health	41 386	51 225	70 514	108 568
ocial security and welfare	8 234	13 852	15 836	21 285
Housing and community amenities:				
Housing	1 613	1 606	1 547	1 705
Community and regional development	607	774	1 233	1 526
Protection of the environment	8 404	8 687	-8 450	7 096
Community amenities n.e.c	68	63	76	143
Recreation and related cultural services	4 229	5 469	7 973	10 446
Economic services:	>			
General administration, regulation and				
research	2 505	2 699	3 895	5 724
Agriculture, forestry and fishing	6 369	6 498	8 015	11 904
Mining, manufacturing and construc-	0 307	0.170	0 015	11 70 1
tion	2 151	4 075	4 142	4 762
Electricity, gas and water	-9760	11 175	-11 805	8 105
Transport and communication;	> 100	11 1/3	11 003	0 103
Rail (non-urban)	18 547	26 348	35 273	47 041
	17 109	17 810	18 863	24 583
Road	2 953	-2591	4 245	-3 704
Urban transit systems (including	2 933	-2 391	4 243	5 104
	10 769	11 881	16 115	24 027
urban rail)				24 02 7
Other transport and communication	29	2 800	61	
Other economic services	866	2 899	3 334	3 591
Other purposes	92 774	98 589	105 776	133 031
Total	347 871	408 106	513 777	663 094

<sup>(</sup>a) Charges for goods and services supplied have been excluded from receipts and deducted in calculating outlay. Incorporates revenue and operating expenses of public trading enterprises.

#### **Taxation**

Until the introduction of the uniform income tax scheme in 1942-43, income tax was the major source of taxation revenue in South Australia. Revenue from this form of taxation for the years 1939-40 to 1941-42 was \$4,718,000, \$4,952,000 and \$5,638,000 respectively or 51.70 per cent, 57.02 per cent, and

<sup>(</sup>b) From 1 January 1974 the Australian Government assumed financial responsibility for tertiary education

59.45 per cent of total revenue from taxation. The following table shows receipts of taxation into Consolidated Revenue Account over the last five years: receipts of taxation into other accounts are shown on pages 613-14, the major forms of taxation now left to the State are payroll tax, motor tax, succession and stamp duties, and land tax.

#### Consolidated Revenue Account: Revenue from Taxation, South Australia(a)

Tax	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Land tax	7 550	9 732	10 212	10 796	12 673
Succession duty	9 030	10 659	11 699	12 598	15 635
Gift duty	733	834	815	1 184	1 197
Racing tax	1 018	1 295	1 444	1 643	2 130
Motor tax	15 671	19 593	20 832	22 427	29 518
Stamp duties (b)	20 711	21 980	30 516	41 899	45 499
Payroll tax		22 804	34 029	<b>5</b> 2 788	82 551
ETSA levy	468	2 081	2 242	3 755	4 863
Business franchises		_	_		8 923
Licences:					
Liquor	3 255	3 591	3 650	4 159	5 351
Other	834	1 063	1 303	1 790	2 231
Court fees and fines	3 297	3 636	3 531	3 613	4 135
Other	178	209	201	251	275
Total	62 745	97 476	120 474	156 903	214 982

#### Proportion of Total Taxation

			Per cent		
Land tax	12.03	9.98	8.48	6.88	5.90
Succession duty	14.39	10.93	9.72	8.03	7.27
Gift duty	1.17	0.86	0.67	0.75	0.56
Racing tax	1.62	1.33	1.20	1.05	0.99
Motor tax	24.98	20.10	17.29	14.30	13.73
Stamp duties $(b) \dots \dots$	33.01	22.55	25.33	26.71	21.14
Payroll tax		23.40	28.24	33.64	38.40
ETSA levy	0.75	2.14	1.86	2.39	2.27
Business franchises					4.15
Licences:					
Liquor	5.19	3.68	3.03	2.65	2.49
Other	1.33	1.09	1.08	1.14	1.04
Court fees and fines	5.25	3.73	2.93	2.30	1.93
Other	0.28	0.21	0.17	0.16	0.13
Total	100.00	100-00	100.00	100.00	100-00

<sup>(</sup>a) Some items and amounts differ slightly from State Treasury classifications.

<sup>(</sup>b) Excludes stamp duty on third party insurance.

Gift duty is payable under the provisions of the Gift Duty Act, 1968-1975. Stamp duty is payable on a wide range of instalment purchase, leasing and other lending transactions.

In addition to the fields of taxation open to the State Government, there are fields of taxation in which the Australian Government has sole taxing authority, e.g. customs and excise duties and sales tax. Before 1942 the Australian Government levied income tax in addition to that imposed by the States but since the commencement of uniform taxation the Australian Government has been, in practice, the sole levier of income tax although the States may still legally operate in this field. Total taxation collected by the Australian Government in South Australia far exceeds State taxation: this is evident from a comparison of the figures in the preceding table with those which follow.

## Australian Government Taxation Collected, South Australia(a)

Tax	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Income tax	332 936	380 318	417 318	577 882	808 979
Sales tax	48 881	52 288	57 732	75 648	89 934
Payroll tax	23 339	8 211	2 467	3 675	6 801
Customs duties	22 646	21 927	29 419	33 546	54 951
Excise duties (b)	93 510	107 822	110 047	139 205	154 036
Estate duty \(\hat{\cdot}\)	5 214	6 513	7 053	5 235	5 519
Gift duty	702	540	530	767	769
Stevedoring industry					
charge	1 547	1 649	1 659	1 951	1 935
Broadcasting Listeners and Television View-					
ers Licences	5 657	7 160	7 721	7 984	2 038
Other	1 407	953	2 633	4 513	11 908
Total	535 837	587 379	636 579	850 406	1 136 870
_			Dollars		
Per head of population	458-73	496-22	532.43	702.35	922.56

<sup>(</sup>a) These figures represent amounts paid into the Australian Government Sub-Treasury in South Australia and do not purport to reflect accurately the taxes paid by residents of this State.

#### **Business Undertakings**

Business undertakings supply such services as passenger and freight rail carriage, sewerage, water supply, harbour facilities, etc. Produce stores provide refrigeration for the storage of goods in Adelaide whilst at Port Lincoln lambs, pigs and cattle are treated for export or local consumption. Revenue from business undertakings for the financial year 1974-75 was \$153 586 000. Total revenue from business undertakings during each of the last five years and the proportion of that revenue to total Consolidated Revenue are shown on page 599. A dissection of revenue from business undertakings is given in the following table.

<sup>(</sup>b) Excludes net diesel fuel tax, non-commercial users.

Revenue	from	Business	Undertakings,	South	Australia(a)
---------	------	----------	---------------	-------	--------------

Undertaking	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Railways (b)	48 140	55 243	57 910	68 688	90 130
Marine and harbors	7 461	7 813	7 324	10 037	10 889
Waterworks	20 275	21 682	25 373	28 383	29 550
Sewers	11 428	13 077	14 269	15 806	17 542
Produce	809	1 016	999	743	1 438
Woods and forests (c)	1 440	1 740	1 800	1 920	2 500
Savings Bank of SA (c)					525
State Bank of SA (c)	556	614	576	542	1 012
Total	90 109	101 183	108 251	126 120	153 586

- (a) Receipts into Consolidated Revenue but excluding recoveries of interest and sinking fund.
- (b) Includes grant from Treasury each year-\$40 000 000 in 1974-75.
- (c) Contribution to Consolidated Revenue from surplus earned.

#### Business Undertakings, Expenditure

Details of the expenditure of business undertakings for the years 1970-71 to 1974-75 are given in the next table. Expenditures in respect of interest and sinking fund have not been taken into account in deriving these figures.

Business Undertakings: Expenditure, South Australia(a)

1970-71	1971-72	1972-73	1973-74	1974-75
<u> </u>		\$'000		
40 663	44 565	49 446	57 461	74 927
	4 659	4 736	5 795	7 185
11 100	11 429	13 703	16 069	20 662
3 668	4 414	4 974	6 689	9 192
976	1 095	1 173	1 190	1 712
60 767	66 162	74 032	87 204	113 678
	40 663 4 360 11 100 3 668 976	40 663	\$'000 40 663	\$'000 40 663

<sup>(</sup>a) Excludes interest and sinking fund.

#### TRUST FUNDS ACCOUNTS

These are principally moneys lodged with the Treasurer by public authorities and other bodies on current account; funds held for specific purposes pursuant to legislation, not necessarily expendable in any one year; contractors' and

statutory deposits and unclaimed moneys. At 30 June 1975 they represented approximately 1.6 per cent of the indebtedness of the South Australian Government. Total balances at 30 June 1973, 1974 and 1975, with many of the larger balances itemised, are shown in the following table.

Trust Funds Accounts, South Australia

Balances at 30 June

Particulars	1973	1974	1975
		\$'000	
Adelaide Festival Centre Trust	1 984	102	108
Electricity Trust of South Australia	800	2 800	
Fire Brigades Board	1 022	1 278	1 523
Flinders University of South Australia	1 569	397	
Pipelines Authority of SA	198	235	2 020
Planning and Development Fund	1 781	3 146	2 181
Leigh Creek Coal Fund	665	787	931
South Australian Housing Trust Fund	12 498	1 854	8 568
South Australian Institute of Technology	1 831	1 116	0 500
South Australian Superannuation Fund	423	846	330
State Bank of South Australia	1 000	1 000	250
University of Adelaide	2 944	358	127
Other	5 040	4 149	4 827
	3 040	4 147	4 027
Balances on which interest is paid	31 755	18 068	20 865
		\$'000	
Agricultural Research and Service Grants	314	584	196
Australian Government Grant for Education	214	50.	170
Purposes	1 220	4 460	8 305
Crown Solicitors Trust Account	877	2 145	2 425
Lotteries Fund	174	394	753
Public Trustee: Common Fund Reserve	182	182	182
Urban Transport	102	102	2 388
	3 666	86	1 297
	3 000	60	1 231
Universities and Colleges of Advanced Education:		1 567	717
State Grants for Capital purposes	2 409	5 412	8 184
Other	2 4U9	3 412	0 104
Balances on which no interest is paid	8 842	14 830	24 447
Total Trust Funds	40 597	32 898	45 312

#### LOAN FUND ACCOUNTS

These accounts record the capitalised expenditure on construction or acquisition of assets such as schools, reservoirs, hospitals, forests, plant and stores; advances to public authorities; and for primary production and housing. During recent years some capital grants (e.g. for university, advanced education and non-government hospital buildings) have also been made from loan funds.

State borrowing programs are subject to consideration and agreement at meetings of the Australian Loan Council. Funds are raised by the sale of Australian Government securities on behalf of the State pursuant to the Financial Agreement which also provides for the redemption of such securities over specified periods from sinking funds contributed by the State and Australian Governments to the National Debt Commission. Gross expenditure from these accounts for the years 1970-71 to 1974-75 is shown in the next table.

Loan Fund Accounts: Gross Expenditure, South Australia

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Undertakings:					
Railways	7 745	8 121	5 218	7 950	9 983
Harbours and jetties	5 307	4 788	6 043	6 006	7 220
Metropolitan water supply and					
sewers	18 228	18 327	18 971	19 078	31 816
Country water supply and					
sewers	12 299	13 449	11 541	11 087	16 654
Irrigation works	649	1 034	792	1 609	2 619
Afforestation	3 068	2 741	3 200	3 300	4 700
Other undertakings	130	168	173	666	459
Loans and advances:					
Advances to primary producers.	2 421	2 135	2 338	2 925	3 034
State Bank of SA	2 000	1 000	2 000	2 000	2 000
Advances for housing (a)	2	27 717	29 863	20	8 <b>09</b>
Tramways Trust	1 000	1 000	400	4 400	4 400
Electricity Trust	4 500	4 500	3 000	3 000	6 000
Pipelines Authority	_	_	_		5 000
State Planning Authority	250	350	1 500	1 500	100
South Australian Land Commis-					
sion		-		4 125	
Monarto Development Commis-					
sion				2 000	1 000
Other loans and advances	139	1 145	256	1 401	839
Other purposes:					
Buildings;					
Hospitals	10 669	13 911	13 873	20 042	25 425
Schools	17 885	22 315	29 770	30 741	46 861
Other	6 532	8 992	12 259	16 418	22 246
River Murray, weirs, etc	48	119	814	1 033	2 575
Capital grants (b)	12 077	11 315	14 579	20 246	6 697
Metropolitan floodwaters, etc.	1 606	1 472	1 464	1 517	1 931
Data processing equipment	920	205	728	692	1 505
Other	3 467	4 886	5 570	6 772	7 328
	110 011	1.40.600	164050	160 506	011 001
Total	110 944	149 690	164 353	168 526	211 201

<sup>(</sup>a) For 1971-72 and 1972-73 includes amounts previously provided under the Housing Agreement.

The following table shows expenditure from loan fund accounts for the year ended 30 June 1975 together with credits and net balances.

<sup>(</sup>b) For university, college of advanced education and non-government hospital buildings.

Loan Fund Accounts

Gross Expenditure, Credits, and Net Balances, South Australia, 1974-75

Particulars	Expendi-		Credits		Net  Aggregate
raticulais	ture	Repay-	Other (a)	Total	Balance at 30 June
Undertakings:			\$'000		
Railways	9 983	4 473	2 892	7 364	143 040
Harbours and jetties	7 220	470	819	1 289	73 013
Metropolitan water supply					
and sewers	31 816	13 490	2 449	15 939	278 774
Country water supply and	16.654	2 200	4 272	C 503	100 240
sewers	16 654	2 209	4 373	6 582	188 349
Irrigation works	2 619	150	192	342	15 200
South-eastern drainage	4 700	16	116	132 3 131	14 735 20 480
Afforestation	4 700 375	3 131	72	72	2 502
	313	-	12	12	2 302
Loans and advances:					
Advances to primary pro-					44.540
ducers	3 034	1 341		1 341	11 513
State Bank of SA	2 000	1.626	105	105	23 268
Advances for housing $(b)$ .	809	1 636	572	2 207	123 980
Tramways Trust	4 400	32	70	102	16 219
South Australian Meat		6	34	40	1 896
Corporation Electricity Trust	6 000	434	1 287	1 721	158 502
Pipelines Authority	5 000	434	1 207	1 /21	10 500
State Planning Authority	100	2 800		2 800	900
South Australian Land	100	2 000		2 000	. 200
Commission				· ·	4 125
Monarto Development					. 123
Commission	1 000	_	177	177	2 823
Other loans and advances	839	20	195	215	4 694
Other purposes:					
			160	160	10 404
_		_	100	100	10 404
Buildings;	25 425	7.460	20 022	26 201	57.040
Hospitals	25 425 46 861	7 469 20 208	28 822 36 073	36 291 56 281	57 949 114 536
Schools Other	22 246	20 208	2 469	4 549	102 800
Other	2 575	231	5 344	5 575	9 586
Leigh Creek Coalfield	2 000	231	104	104	6 752
Education Department—	2 000	_	104	104	0 732
purchase of buses	801		361	361	2 081
Metropolitan floodwaters	001		201	201	2 001
and drainage	1 931	757	1 650	2 407	13 416
Data processing equipment	1 505	235	644	879	2 373
Other	11 222	1 009	9 097	10 107	9 019
Total	211 201	62 198	98 076	160 273	1 423 429

<sup>(</sup>a) Includes securities redeemed and cancelled by the National Debt Commission on account of South Australia (\$25 149 000), Capital Works grants from the Australian Government (\$46 927 000) and amount for which the Australian Government has assumed all interest and principal liability (\$26 000 000).

<sup>(</sup>b) Includes amounts previously provided under the Housing Agreement.

#### SPECIAL AUSTRALIAN GOVERNMENT ADVANCES

Pursuant to agreements with the States, the Australian Government has made sums available to the State for various purposes. These advances are not subject to sinking fund conditions but are repayable by annual instalments in terms of the respective agreements. Details of Australian Government advances, repayments and interest on these advances for the years 1970-71 to 1974-75 are shown in the following table.

Australian Government Advances to South Australia, Repayments and Interest on these Advances

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
		············	\$,000		· · · · · · · · · · · · · · · · · · ·
Advances:					
Housing $(a)$	25 000		500	32 750	<i>5</i> 6 360
Growth centres		_		4 059	4 978
Land acquisition			_	8 000	17 619
Sewerage	_		_	1 598	4 025
Dartmouth Dam			675	95 <b>0</b>	2 500
Rural reconstruction		2 250	4 575	3 225	1 500
Natural gas	2 250	1 750	_		
Urban water supply	_	_			4 400
Railways	687	354	131	154	448
Other advances	1 590	198	876	252	871
Total advances	29 527	4 552	6 757	50 988	92 701
Repayment of advances:					
Housing	1 831	1 975	2 054	2 139	2 398
Natural gas			1 875	1 875	1 875
Railways	341	357	363	365	1 022
Other repayments	80	80	81	480	82
Total repayments	2 252	2 412	4 373	4 859	5 377
Interest on advances:					
Housing	10 466	11 160	11 081	11 751	13 391
Growth centres		-		1	447
Land acquisition	_				975
Rural reconstruction		1	157	421	565
Natural gas	648	806	858	747	636
Railways	935	967	964	947	949
Other interest	45	44	44	103	213
Total	12 094	12 978	13 104	13 970	17 176

<sup>(</sup>a) For 1971-72 and 1972-73 allocations for housing were included in the normal State loan works programs.

#### LOAN RAISINGS AND THE PUBLIC DEBT

#### State Debts Taken Over by the Australian Government

Under the Financial Agreement the Australian Government took over on 1 July 1929 State responsibilities to bond-holders in respect of State debts existing on 30 June 1927; and all debts of each State existing on 1 July 1929 for money

borrowed by that State are deemed to be money borrowed by the Australian Government for and on behalf of the State. The Australian Government agreed to contribute one-third of sinking funds required to repay those debts over a period of fifty-eight years.

Also for a period of fifty-eight years from 1 July 1927 the Australian Government agreed to contribute the sum of \$15 169 824 (\$1 407 632 for South Australia) each year towards the interest payable on the State debts. The balance of the interest payable on State debts was to be paid into the National Debt Sinking Fund by the States.

The Australian Government in 1970 passed legislation providing for Australian Government assumption of responsibility for charges on \$200 million of existing State debt at the beginning of each of the five years commencing 1970-71. The amount of South Australian debt taken over at the beginning of 1974-75 was \$130 000 000.

#### Australian Loan Council

One of the main features of the Financial Agreement was the establishment of the Australian Loan Council which was set up to co-ordinate the borrowings of the Australian and State Governments. It consists of the Prime Minister of Australia, or another Minister nominated by him in writing, as chairman, and the State Premiers, or Ministers nominated by them in writing.

Each year, the Loan Council examines the loan programs of the Australian and the State Governments and determines the total amount to be borrowed during the year. Borrowings by the Australian Government for defence purposes are not subject to decisions of the Loan Council.

Subject to the decisions of the Loan Council the Australian Government arranges for all borrowings for or on behalf of itself or any State, and for all conversions, renewals, redemptions, and consolidations of the securities issued on behalf of the Australian and State Governments. If the Loan Council unanimously decides, however, a State may borrow outside Australia in its own name, and may issue securities for the amount so borrowed. The Australian Government then guarantees that the State will fulfil its obligations to bond-holders in respect of the money so borrowed, and the money is deemed to be borrowed by the Australian Government for and on behalf of the State.

Subject to any maximum limits decided upon by the Loan Council for interest, brokerage, discount, and other charges, the Australian or any State Government may borrow within its own territory, for any purpose, money from any authorities, bodies, funds, or institutions (including savings banks) constituted or established under Australian or State law or practice; borrow from the public by means of counter sales of securities; and use any available public moneys. However, any securities issued for moneys so borrowed or used must be Australian Government securities on terms approved by the Loan Council.

Since 1936 the Australian Loan Council has, by the consent of its members, exercised substantial control over the limits of borrowing by local government and public corporations.

#### **National Debt Commission**

The National Debt Commission and the National Debt Sinking Fund which it administers were created under the National Debt Sinking Fund Act 1923. All previously existing sinking funds relating to Australian Government debt were merged in the National Debt Sinking Fund at the time of its establishment; and under the provisions of the Financial Agreement of 1927 all relevant interest and principal contributions by both the Australian and the State Governments, in respect of State debts, are negotiated through the Fund.

These contributions are not accumulated but are applied by the Commission to the redemption of the public debts of the States, and the repurchase of securities issued in respect thereof. Under the provisions of the Financial Agreement, repurchased or redeemed securities must be cancelled, and the debts of the States are reduced accordingly.

Contributions by the Australian Government on behalf of South Australia, and by the State Government to the National Debt Sinking Fund, and redemptions and repurchases of securities by payment from the Fund for the financial years 1973-74 and 1974-75 are given in the following table. Corresponding figures for all States are also stated.

National Debt Sinking Fund

	197	73-74	1974-75		
Particulars	South Australia	All States	South Australia	All States	
Receipts:		\$'	000		
Contributions by Australian Government  Contributions by State (a)	3 896 4 138	29 509 31 498	4 072 4 312	30 805 32 791	
cancelled debt	9 888 50	75 611 2 934	10 686 50	82 085 2 623	
Contributions by State on loans for wasting assets	295	692	313	696	
repurchased securities to date of can- cellation of securities	9	139	8	96	
State funds during the year Special contributions in respect of loans	34	308	36	213	
converted at a discount		92		92	
Total receipts	18 311	140 783	19 477	149 400	
Expenditure: Redemptions and repurchases:					
In Australia	12 561	100 439	13 978	111 935	
In London	108	17 876	8 661	45 107	
In New York	686 22	6 300 164	736	6 823	
In Netherlands	68	532	63 82	465 644	
Total expenditure	13 444	125 311	23 520	164 975	

<sup>(</sup>a) Includes 0.75 per cent contributions on Australian Government debentures issued on behalf of the States.

#### The Loan Fund

A summary of loan raisings to finance State Government loan works in South Australia during 1974-75 is given in the following statement.

## The Loan Fund, South Australia

W 6 1	\$'000
(1) Cash operations:	
Surplus at 30 June 1974	4 497
Receipts:	
New loan raising	99 483
Repayments	62 198
Capital works grant	46 927
	213 104
Payments	211 201
-	
Surplus at 30 June 1975	1 903
(2) Movement in public debt:	
The public debt at 30 June 1974	1 401 227
	1 481 337
Add: Face value of new loans raised:	
For cash	99 483
For conversion	127 061
	1 707 881
Less: Face value of securities redeemed and cancelled by	
National Debt Commission	
Loans converted	
··········	152 548
_	
The public debt at 30 June 1975	1 555 333
- · · · · · · · · · · · · · · · · · · ·	

#### The Public Debt

The following table gives details of the public debt and total indebtedness of South Australia at 30 June 1975 and for the four previous years.

## Public Debt and Total Indebtedness, South Australia

At 30 June	Public Debt—Being Interest Bearing Securities Outstanding		Other Interest Bearing Indebted-	Non- interest Bearing Indebted-	Total Indebtedness		
	Total	Per Head	ness (a)	ness (a)	Total	Per Head	
1971 1972 1973 1974 1975	1 415 129 1 481 337	\$ 1 070·40 1 124·08 1 180·16 1 218·20 1 259·38	\$'000 310 167 312 274 330 521 362 977 451 080	\$'000 3 603 5 615 8 842 14 830 24 447	\$'000 1 570 108 1 651 610 1 754 492 1 859 143 2 030 859	\$ 1 337·73 1 392·00 1 463·17 1 528·90 1 644·42	

<sup>(</sup>a) Gross less securities held on these accounts.

Public Debt: Interest Payable and Average Rate, South Australia

At -	Annual Interest on Debt (a) in Averag			erest on Debt (a) in			Per Cen	t (a)
30 June	Aus- tralia	London	Other	Total	Aus- tralia	London	Other	Total
		\$'0	00			Doll	lars	
1971	71 472 76 461 84 594	1 191 1 044 966 953 648	858 753 621 562 500	71 656 73 268 78 048 86 109 98 759	5·76 5·53 5·54 5·85 6·37	3·86 3·97 3·95 3·94 4·68	5·30 5·31 5·36 5·35 5·35	5·70 5·49 5·52 5·81 6·35

<sup>(</sup>a) Based on the Debt converted at rates current at the time of the several raisings, and nominal rate of interest payable at 30 June taking no account of exchange.

Rates of interest on the public debt of South Australia are shown in the following table.

Public Debt According to Rate of Interest, South Australia
At 30 June

				19	75		
Nominal Rate Per Cent	1973	1974	T-4-1	Redeen	Redeemable In		
			Total	Australia	Other (a)		
			\$'000		<del>.</del>		
10½ per cent and over	_		18 826	18 826			
10 and under 101 per cent			2 979	2 979			
91 and under 10 per cent			56 307	56 307			
and under 9½ per cent			44 558	44 558			
81 and under 9 per cent	_	49 838	120 885	120 885	_		
$8^{\circ}$ and under $8\frac{1}{2}$ per cent		69 541	67 033	67 033	-		
74 and under 8 per cent	_				_		
7 and under $7\frac{1}{2}$ per cent	84 025	106 678	106 678	106 678			
61 and under 7 per cent	136 477	106 368	101 718	101 718	_		
6 and under 6½ per cent	172 504	136 849	136 755	135 585	1 170		
54 and under 6 per cent	104 271	103 393	98 991	85 377	13 614		
and under 5½ per cent	672 271	667 569	625 824	623 609	2 216		
Under 5 per cent	160 673	142 173	79 082	72 885	6 197		
Special bonds $(b)$	84 906	98 925	95 696	95 696			
Total1	415 129	1 481 337	1 555 333	1 532 136	23 197		

<sup>(</sup>a) \$13 853 000 redeemable in UK, \$6 338 000 in USA, \$1 119 000 in Canada, \$1 402 000 in Switzerland and \$484 000 in Netherlands. Converted at rates current at the time of the several raisings. Debt redeemable at rates of exchange obtaining at 30 June 1975 totalled \$19 203 000 resulting in a contingent asset of \$3 994 000.

<sup>(</sup>b) Rate of interest varies from 5.2 to 9.2 per cent according to date of maturity.

In the following table, the public debt of South Australia is classified according to the year of maturity.

Public	Debt	According	to	Year	of	Maturity,	South	Australia
				At 30	Jar	ie.		

						1975	
Year of Maturity	1971	1972	1973	1974	Total	Redeen	nable In
					Total	Australia	Other (a
				\$'000			
971-72	125 059		-	_			
972-73	102 536	102 073	_				_
973-74	93 618	134 097	133 638			_	_
974-75	66 646	82 082	115 859	117 668			
975-76	74 809	122 659	181 021	206 318	205 646	203 700	1 94
976-77	45 134	50 474	49 796	81 710	124 412	124 412	_
977-78	72 451	71 319	70 015	63 638	104 718	102 827	1 89
978 <b>-7</b> 9	63 334	68 571	67 387	61 683	61 315	57 886	3 42
979-80	39 043	38 922	38 753	38 645	83 073	82 420	65
980-81	39 130	45 057	44 958	104 158	84 931	83 190	1 74
981-82	35 448	51 781	65 734	65 396	89 700	85 483	4 21
982-83	12 244	23 413	49 232	39 085	42 573	40 670	1 90
983-84	48 842	48 842	56 645	88 887	90 937	90 311	62
984-85	60 450	60 450	60 450	60 450	88 629	88 629	_
985-90	247 138	250 463	250 186	249 872	273 089	271 093	1 99
990-95	27 970	61 122	99 357	171 728	174 213	174 213	-
95-2000	3 626	3 626	3 626	3 626	3 626	3 626	-
000-2005	82 456	82 456	83 777	83 777	83 777	83 777	_
005-2010	10 591	30 521	38 949	38 949	38 949	38 949	_
piional	5 613	5 594	5 547	5 547	5 545	751	4 79
terminable	197	197	197	197	197	197	_
definite	2	2	2	2	2	2	-
Total	1 256 337	1 333 720	1 415 129	1 481 337	1 555 333	1 532 136	23 19

<sup>(</sup>a) \$13 853 000 redeemable in UK, \$6 338 000 in USA, \$1 119 000 in Canada, \$1 402 000 in Switzerland and \$484 000 in Netherlands. Converted at rates current at the time of the several raisings. Debt redeemable at rates of exchange obtaining at 30 June 1975 totalled \$19 203 000, resulting in a contingent asset of \$3 994 000.

#### DEPOSIT AND SUSPENSE ACCOUNTS

Reference to these accounts was made in Part 11.1. Although the main function of many of them is to facilitate the allocation of charges and recoups to various headings of revenue and expenditure within the Budget sector, some contain, as already noted, substantial transactions which are not reflected in the Budget. Deposit and Suspense accounts showed a credit balance of \$26 188 000 at 30 June 1975.

#### STATE TAXATION

In addition to those items received into Consolidated Revenue Account the State Government receives certain items of taxation into other accounts. These, together with similar receipts by public corporations, constitute 'total taxation to other accounts' as recorded in the following table.

#### State Taxation, South Australia (a)

Tax	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
To Consolidated Revenue	62 745	97 476	120 474	156 903	214 982
To other accounts:					
Road maintenance charges	2 958	3 287	3 401	3 859	4 050
Lottery tax	1 864	1 903	1 967	2 351	3 648
Racing taxes	2 378	3 005	3 745	4 613	6 169
Stamp duty	1 110	1 122	1 138	1 251	1 643
Insurance company contributions					
(b)	1 204	1 474	1 840	2 586	4 597
Reserves contributions (c)	199	237	561	1 010	1 109
Other	343	267	400	465	672
Outer	575	207		103	0,2
Total to other accounts	10 055	11 295	13 053	16 135	21 887
Fotal taxation	72 800	108 772	133 527	173 038	236 869
• •			Dollars		
Per head of population	62.32	91.89	111-68	142-91	192-22

<sup>(</sup>a) Some items and amounts differ slightly from State Treasury classifications.

## 11.4 PUBLIC CORPORATION FINANCE

For the purpose of determining the scope of public corporation finance statistics, a public corporation is defined as a body (other than a local government authority) created by or under legislation to carry out an activity or activities on behalf of a government, or a body in which a government has a controlling interest.

Many public corporations produce annual reports reviewing their activities and most of them publish financial statements. In South Australia there is no consolidated tabulation of statistics covering revenue and expenditure of public corporations.

#### **Business Undertakings**

Some public corporations are classified as business undertakings because they seek to cover a substantial part of their costs by selling goods and services to the public. The following tables show revenue and expenditure of some of those business undertakings for the financial years 1970-71 to 1974-75. Capital indebtedness refers to the amount outstanding at the end of the relevant period on indebtedness incurred initially for a period exceeding twelve months.

<sup>(</sup>b) Fire protection.

<sup>(</sup>c) Paid to State Planning Authority under Planning and Development Act and Real Property Act.

## Electricity Trust of South Australia

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Income	69 518 52 997	74 883 58 159	80 290 62 040	92 178 72 594	108 492 91 149
Surplus on operating Debenture interest	16 521 15 853	16 724 17 058	18 250 17 841	19 584 18 650	17 343 19 758
Net surplus	668	334	409	934	-2 415
Capital indebtedness	291 166	304 660	312 215	318 788	332 439

## State Transport Authority, Bus and Tram Division(a)

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		·
Income	6 881 6 986	6 978 7 282	7 304 8 269	9 958 11 735	13 427 18 951
Deficit on operating Interest charges	104 356	304 340	965 406	1 777 469	5 524 874
Deficit	460 480 —	644 630	1 371 1 330	2 246 2 250	6 398 5 900 488
Net surplus	20	-14	-41	4	-10
Capital indebtedness	5 781	7 268	7 596	11 920	18 023

<sup>(</sup>a) Formerly the Municipal Tramways Trust.

## State Bank of South Australia

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
	······································	· · · · · · · · · · · · · · · · · · ·	\$'000		
Income	1 784 1 438	11 266 2 039 1 532	12 141 2 270 1 549	14 783 2 733 2 074	20 055 3 946 3 809
Treasurer of SA		6 415	7 118	7 952	9 376
Net profit	1 364	1 280	1 205	2 024	2 924
Capital indebtedness	121 435	133 802	149 700	169 469	197 236

## Leigh Creek Coal Fund

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Income	5 284	5 366	5 547	5 788	7 563
Operating expenses	5 234	5 093	5 300	5 559	7 306
Surplus on operating	50	273	247	229	257
Interest	50	273	247	229	257
Net surplus					<del></del>
Capital indebtedness	5 444	5 052	4 957	4 857	6 752

## South Australian Housing Trust

1970-71	1971-72	1972-73	1973-74	1974-75
		\$'000		
 19 314	20 091	21 939	24 820	28 617
 8 335	9 393	11 091	12 657	16 625
 10 979	10 699	10 848	12 162	11 992
 9 265	10 323	11 471	11 699	12 514
 1 714	376	623	463	<b>—522</b>
 253 335	272 156	294 341	317 445	353 860
	19 314 8 335 10 979 9 265	19 314 20 091 8 335 9 393 10 979 10 699 9 265 10 323 1 714 376	\$'000 19 314 20 091 21 939 8 335 9 393 11 091 10 979 10 699 10 848 9 265 10 323 11 471 1 714 376 —623	\$'000 19 314 20 091 21 939 24 820 8 335 9 393 11 091 12 657 10 979 10 699 10 848 12 162 9 265 10 323 11 471 11 699 1 714 376 —623 463

## Savings Bank of South Australia

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Income	25 654	28 965	33 148	40 385	53 890
Management expenses, etc	7 929	9 446	11 259	13 556	17 523
Interest on customers' deposits	17 026	18 311	20 067	25 577	35 445
Net profit	699	1 209	1 821	1 252	922
Depositors' balances (a)	438 793	469 607	537 953	591 822	697 459

<sup>(</sup>a) At end of period. Figures include deposit stock.

#### South Australian Meat Corporation

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
		· · · · · · · · · · · · · · · · · · ·	\$'000		
Income	7 713 7 895	9 078 9 441	11 026 10 973	10 633 10 452	13 757 12 793
Surplus on operating	181 90	—364 _110	5 <b>3</b> 124	181 303	964 705
Net surplus	<b>—271</b>	474	<b>—71</b>	—122	259
Capital indebtedness	1 772	2 320	2 662	6 080	12 469

#### GRANTS FROM STATE GOVERNMENT

The following table shows grants to a number of public corporations during each of the five years ended 30 June 1975. Grants from Consolidated Revenue Account and from Loan Fund have been consolidated and the figures represent actual amounts paid to authorities, free of all duplication. Payments for goods and services supplied by public corporation business undertakings are not included in the table. Repayable advances from Loan Fund are also excluded. The table excludes grants to universities and hospitals other than subsidised hospitals as for the purpose of Public Finance statistics these are considered to be final expenditure. Details of grants made to colleges of advanced education before 1 January 1974 are also excluded because from that date the Australian Government assumed full financial responsibility for all tertiary education.

Public Corporations: Grants From State Government, South Australia

Name	1970-71	1971-72	1972-73	1973-74	1974-75
			\$'000		
Adelaide Festival Centre Trust	_	28	312	812	1 156
Coast Protection Board (a)		_	600	676	<b>2</b> 81
Fire Brigades Board	300	395	410	583	756
Institute of Medical and Veterinary Science	1 371	1 690	2 280	3 330	5 377
Tram Division	480	630	1 330	2 250	5 900
Monarto Development Commission				64	504
SA Film Corporation			25	466	720
SA Theatre Company		_	140	293	466
State Planning Authority		300	300	300	300
Subsidised hospitals (b)	2 259	3 613	2 293	2 752	3 940
Other	255	301	493	503	913
Total	4 665	6 957	8 183	12 029	20 313

<sup>(</sup>a) Includes advances from State Loan Fund that are cleared of liability by allocations from Australian Government capital works grants.

<sup>(</sup>b) Includes hospitals determined to be country subsidised hospitals under Part IV of the Hospitals Act, 1934-1971.

#### LOAN RAISINGS AND DEBT OUTSTANDING

Details of public corporation loan raisings and debt outstanding are included in the following tables. New loans raised during the year include new loan liabilities incurred during the year, loans raised to repay indebtedness to the Government, and interest capitalised. Loans raised and redeemed within the year, increases in overdrafts, and loans raised for conversion or redemption of existing debts are excluded.

Debt includes all liabilities for which arrangements have been made for repayment over a period of one year or more, and net overdrafts. Interest capitalised, and amounts due for the capital cost of assets or for services rendered which are to be repaid over a period of one year or more, have also been included. Current liabilities such as interest accrued (but not capitalised), trade creditors, amounts held in trust and other debts which are to be repaid in less than one year are not included. Net overdraft is the gross overdraft of all funds, less all bank credit balances (including fixed deposits), which do not form part of a sinking fund to repay a loan.

The next two tables show, respectively, new money loan raisings and funds provided for redemption of debt for the year ended 30 June 1974 and debt outstanding at 30 June 1973 and 1974. A further table shows debt outstanding at 30 June 1974 according to rate of interest and year of maturity.

Public Corporations: New Money Loan Raisings and Funds Provided for Redemption of Debt, South Australia, 1973-74

A	New Loan Raisings in Australia			Funds for Redemption of Debt (a)			
Activity	From Govern- ment Lenders	Other	Total	To Govern- ment Lenders	Other	Total	
			\$'	000			
Banking	22 527		22 527	2 757		2 757	
Buses and trams	4 400		4 400	76		76	
Community and regional		1.000	21 542				
development	20 543	1 000 3 050	21 543 3 050				
Culture	2 455	10 071	12 526	1 633	2 344	22 3 977	
Gas pipelines	2 433	2 275	2 275	1 033	15	15	
Housing	15 500	10 160	25 660	1 901	665	2 566	
Other	684	4 605	5 289	144	73	218	
Total	66 109	31 161	97 269	6 510	3 119	9 630	

<sup>(</sup>a) Includes amounts credited to Sinking Funds and excludes amounts redeemed from Sinking Funds.

# Public Corporations: Debt Outstanding, South Australia At 30 June 1973 and 1974

	Debt in Australia at						
Activitu	3	0 June 19	73	30 June 1974			
	To Govern- ment Lenders	Other	Total	To Govern- ment Lenders	Other	Total	
				000			
Banking	149 700		149 700	169 469		169 469	
Buses and trams			7 596	11 920		11 920	
Community and regional	l						
development	2 100	1 850	3 950	22 643	2 850	25 493	
Culture		4 192	4 192		7 520	7 520	
Electricity supply	152 056	160 418	312 474	154 223	167 599	321 823	
Gas pipelines	18 625	24 846	43 471	15 500	27 681	43 181	
Housing	227 076	67 265	294 341	240 686	76 759	317 445	
Other		3 369	12 299	9 471	7 483	16 954	
Total debt	566 084	261 939	828 022	623 912	289 893	913 805	
		Ann	ual Interes	t Payable (	\$'000)		
Total interest	27 027	15 985	43 012	30 694	18 596	49 288	

## Public Corporations: Debt Outstanding According to Rate of Interest and Year of Maturity, South Australia At 30 June 1974

Rate of Interest	Debt	Year of Maturity	Debt
	\$'000		\$'000
No interest	. 22 974	Fixed dates:	
Under 4 per cent		1974-75	7 133
4 and under 4½ per cent	. 142 285	1975-76	7 763
4 and under 5 per cent	. 97 347	1976-77	5 683
5 and under 5 per cent	. 209 390	1977-78	12 286
51 and under 6 per cent	. 162 559	1978-79	13 148
6 and under 6½ per cent	105.005	1979-80	13 283
61 and under 7 per cent		1980-81	12 811
7 and under 7½ per cent		1981-82	8 496
7 and under 8 per cent		1982-83	13 636
8 and under 83 per cent		1000.04	26 028
	4	1004.05	11 202
9 per cent and over		1985-86 and onwards	95 454
Not specified	. 1 803	Not stated	43 299
		Yearly or less	617 941
		Not stated	25 227
		Net overdraft	414
Total debt	. 913 805	Total debt	913 805

## 11.5 LOCAL GOVERNMENT FINANCE

For the purpose of determining the scope of local government finance statistics, a local government authority is defined as:

- (i) An authority set up under a local government Act to carry out the functions of local government in a defined area (known as a municipality or district council area) and which is elected by the property owners and occupiers in the area;
- (ii) An authority created or acquired by a local government authority (as defined above) or by two or more local government authorities. (In South Australia an authority established under Part XIX or Section 666(c) of the Act.)

#### REVENUE AND EXPENDITURE

The expenditure of moneys by local government bodies is authorised by the Local Government Act, 1934-1975. Under the Act each council is required to prepare a balance sheet and statement of its accounts on an accrual basis for each financial year and these statements are the basis of the statistics published on local government finance.

#### **Government Grants**

Local government authorities receive general purpose and specific purpose grants from the Australian and State Governments. Some Australian Government grants are paid direct to local government authorities while the remainder are paid to the State Government for on-passing to the relevant authorities.

The following table shows Australian Government grants paid direct to local government authorities for the last three years.

#### Australian Government Grants Paid Direct to Local Government Authorities

Grant	1972-73	1973-74	1974-75
Aged or disabled persons homes Child care and pre-schools Aboriginal advancement Aerodrome local ownership plan Regional Employment Development Scheme Total	37	\$'000 269 3 296 10	423 155 225 23 3 596

Details of the amounts on-passed by the State Government during the last three years are given in the following table. These grants are included with the grants to State and local government authorities shown on page 597.

## Australian Government Grants On-passed by the State Government to Local Government Authorities(a)

Grant	1972-73	1973-74	1974-75
		\$'000	
Senior citizens centres	136 140	47 10	435
National Estate		_	92 284
Grants Commission		_	4 774 66
Area improvement			292
Total	276	57	5 943

<sup>(</sup>a) Grants for tourism development are included under 'Tourism' in the following table.

The State Government also makes various grants to local government authorities. Details of these grants made over the last three years are shown in the table below.

State Government Grants Paid to Local Government Authorities

Grant	1972-73	1973-74	1974-75
		\$'000	
Civil defence	8	9	9
Libraries	148	216	317
Roads	3 896	3 721	3 981
Urban stormwater drainage	452	753	811
Urban effluent drainage		139	839
Weed control	117	136	156
Public parks	274	635	386
Fire protection	121	109	197
Drought relief	118	107	177
Unemployment relief (a)	7 128	3 660	1 373
man and the state of the state	/ 120	1 336	2 045
	75	1 330	2 043
Swimming pools	25	-	122
Tourism (b)	85	100	132
Sporting and recreation facilities	<del>-</del> .		281
Senior citizens centres	34	12	56
Rundle Street Mall	<del></del> -	<del></del> -	40
Festival Theatre	2 131	<b>480</b>	76
Debt Servicing (Festival Theatre)	_	-	148
Total	14 537	11 421	10 854

<sup>(</sup>a) Includes \$5 720 000 in 1972-73, \$3 659 000 in 1973-74 and \$1 373 000 in 1974-75 from Australian Government grants to the State for unemployment relief.

<sup>(</sup>b) Includes Australian Government grants for tourism development.

#### Assessments

Assessments for property rating are based upon annual value or land value. Annual value is based on the estimated gross annual rental at which a ratable property would be let from year to year with an allowance, not exceeding one-quarter, to cover all outgoings; whereas land value is an estimate of the value of the land (regardless of structural improvements) included in a property. A council may adopt the 'annual' valuations or the 'land' valuations of the State Valuer-General or may make its own valuation of properties.

#### Rating of Properties

A council may declare general or differential rates on properties in its area. Special rates may be levied for street watering or other purposes.

#### Revenue Transactions

The following tables show revenue transactions for local government authorities for 1973-74 prepared on an accrual basis.

Local Government Authorities

General Fund, Reserve Fund and Government Grants Fund, Income

South Australia, 1973-74

Particulars	Adelaide Statistical Division (a)	Other Areas	Total
		\$'000	
Caxation: Rates:			
Declared for year	29 528	12 404	41 932
Fines on overdue rates		37	108
Ex gratia payments in lieu of rates		75	162
Total rates	29 686	12 516	42 203
Licences and permits;			
Building	437	99	537
Dog	118	67	185
Other	81	32	114
Total licences and permits	637	198	835
Total taxation	30 323	12 714	<b>43 0</b> 37
Public works:			
Reimbursements for roadworks:			
State Government (b)	1 473	1 147	2 620
Ratepayers (moieties)		225	852
Other	580	142	722
Sewerage and effluent drainage fees	217	231	449

Local Government Authorities

General Fund, Reserve Fund and Government Grants Fund, Income
South Australia, 1973-74 (continued)

Particulars	Adelaide Statistical Division (a)	Other Areas	Total
Public services:		\$'000	
Ferries Ferries Fire protection Hospitals and health (including cemeteries,	- 69	408 91	408 160
etc.).  Libraries  Sanitary and garbage  Traffic and parking  Weed control  Other	127 184 216 2 027 31 193	129 45 202 12 218 243	256 229 418 2 039 249 437
Total public services	2 848	1 347	4 195
Council properties: Current; Halls and theatres Houses Markets Parks, gardens, recreation, etc. Swimming pools Other Capital (c); Land and buildings Other  Total council properties	383 431 211 1 212 214 465 274 73	132 158 16 918 66 541 37 48	514 588 228 2 130 280 1 006 311 121 5 178
Government grants for roadworks: Grants (d)	316 1 432	3 439 2 088	3 755 3 519
Total Government grants for roadworks	1 748	5 527	7 275
Other income: Fines (mainly traffic and parking) Interest	643 1 134 306 217	11 159 566 319	655 1 293 872 536
Total other income	2 300	1 054	3 355
Total income	43 380	24 302	67 682

<sup>(</sup>a) Adjusted to include the whole of Meadows and Willunga District Council areas and to exclude the whole of Mudla Wirra. (b) Mainly reinstatements. (c) These values are understated to the extent that some councils report expenditures net of trade-ins and do not show trade-in values as income from the sale of assets. (d) Other grants and subsidies are included under respective functional headings above. (e) For work done on behalf of Highways Department.

Local Government Authorities
General Fund, Reserve Fund and Government Grants Fund, Expenditure
South Australia, 1973-74

Particulars	Adelaide Statistical Division (a)	Other Areas	Total
		\$'000	
General administration	4 111	2 647	6 758
Debt services:			
Interest;			
On loans	3 604	658	4 262
On overdraft	34	81	115
Principal redeemed	2 754	1 458	4 212
Total debt services	6 392	2 198	8 590
Public works:			
Roads, streets and bridges;			
Construction	6 621	6 949	13 570
Maintenance	5 051	4 539	9 590
Road, etc. plant—running costs unallocated		1 077	2 421
Sewerage and effluent drains;			
Construction	104	116	220
Maintenance	104	67	173
Contributions to stormwater drainage	100	07	175
schemes (b)	976	253	1 229
Total public works	14 202	13 001	27 203
D. I.F.			
Public services:			
Building Act	655	126	782
Ferries	1 026	409 275	409 1 302
Fire protection	1 020	2/3	1 302
etc.)	1 850	869	2 719
Libraries	583	127	709
Sanitary and garbage	2 192	545	2 737
Street cleaning	441	20	460
Street lighting	1 109	292	1 401
Tourism	_27	151	179
Town planning	799	24	823
Traffic and parking	1 659	30 69	1 689 95
Vermin control	26 109	458	95 567
Other	135	145	280
Total public services	10 609	3 542	14 150

Local Government Authorities

General Fund, Reserve Fund and Government Grants Fund, Expenditure

South Australia, 1973-74 (continued)

Particulars	Adelaide Statistical Division (a)	Other Areas	Total
Council monomics		\$'000	
Council properties: Current;			
	512	261	773
Hails and theatres	257	70	328
Markets	88	70	98
Offices	10	36	46
The state of the s	4 158	1 645	5 803
Swimming pools	293	116	409
0.1	111	426	537
Other	111	420	551
Land and buildings,			
Halls and theatres	140	28	168
	98	142	239
Houses	529	219	747
Senior citizens	235	4	239
Other	267	217	485
Plant and machinery,	207	217	403
Roadmaking	638	627	1 265
Other	73	43	116
Other assets	207	80	287
Other assets	207		201
Total council properties	7 617	3 923	11 540
Other expenditure:			
Cost of private works	280	501	781
Donations to charitable organisations,	70	44	116
clubs, etc	72	44	116
Other	277	239	516
Total other expenditure	628	785	1 413
Total expenditure	43 559	26 095	69 654

<sup>(</sup>a) Adjusted to include the whole of Meadows and Willunga District Council areas and to exclude the whole of Mudla Wirra.

#### LOAN FUND INCOME AND EXPENDITURE

The following table shows the major items of loan fund income and expenditure for 1973-74 prepared on an accrual basis.

The principal source of income was from new money loan raisings (\$10 845 000) while the major expenditure items were the construction of roads, streets and bridges (\$2 725 000), and stormwater drains (\$1 313 000).

<sup>(</sup>b) Expenditures in respect of South-Western Suburbs Drainage Scheme are included under debt services above.

<sup>(</sup>c) These values are understated to the extent that some councils report expenditures net of trade-ins.

Local Government Authorities: Loan Fund Income and Expenditure South Australia, 1973-74

Particulars		Adelaide Statistical Division (a)	Other Areas	Total
			\$,000	
Income:				
Loans raised		7 212 405	3 633 4	10 845 409
Total income		7 617	3 637	11 254
Expenditure:				
Public Works;				
Roads, streets and bridges,				
Construction		2 436	289	2 725
Maintenance		34	3 345	38 1 313
Stormwater drains	• •	967 23	224	247
Total public works		3 461	862	4 322
Construction or purchase of assets;				
Land and buildings,				
Halls and theatres		450	3	452
Houses		46	27	73
Offices, etc	٠.	820 563	320	820 883
Other	• •	436	320 449	885
Plant and machinery,	• •	.50		
Roadmaking		57	325	383
Other assets			171	171
Other		16	53	68
Total construction or				
purchase of assets		2 387	1 348	3 735
Business undertakings (b)		<del></del>	403	403
Total expenditure		5 848	2 613	8 461

<sup>(</sup>a) Adjusted to include the whole of Meadows and Willunga District Council areas and to exclude the whole of Mudla Wirra. (b) Includes land, buildings, plant, etc.

#### LOAN RAISINGS AND DEBT OUTSTANDING

Local government authorities loan raisings and debt outstanding are shown in the following tables. The definitions of 'new loans raised' and 'debt', given on page 618 under 'Loan Raisings and Debt Outstanding', apply to the statistics in this section also.

The table below shows new money loan raisings and funds provided for redemption of debt for the years 1964-65 to 1973-74.

Local Government Authorities: New Money Loan Raisings and Funds Provided for Redemption of Debt, South Australia

	N	ew Loan R	aisings in	Australia	Funds for Redemption of Debt		
Year I	F	rom Govt	Other	Total	To Govt	Other	Total
					\$'000		
1964-65		726	5 391	6 117	1 038	1 219	2 258
1965-66(b).		3 263	5 282	8 545	1 144	1 331	2 474
1966-67		2 291	6 981	9 272	1 101	1 817	2 917
1967-68		1 027	7 365	8 392	1 009	1 853	2 862
1968-69		470	7 455	7 925	905	2 068	2 973
1969-70		504	9 430	9 934	822	2 481	3 303
1970-71		939	10 338	11 277	671	2 851	3 522
1971-72		328	10 111	10 439	537	3 409	3 946
1972-73		290	9 546	9 836	520	3 809	4 329
1973-74		30	10 815	10 845	367	3 971	4 338

<sup>(</sup>a) Includes amounts credited to Sinking Funds and excludes amounts redeemed from Sinking Funds: both these figures are small in South Australia.

The following table shows for local government authorities total debt outstanding and annual interest payable on this debt for the years 1964-65 to 1973-74. A further table shows debt outstanding at 30 June 1974 classified according to rate of interest and purpose.

Local Government Authorities: Debt Outstanding and Annual Interest Payable, South Australia

	Del	ot in Austra	alia	Annual	al Interest Payable		
Year	To Govt	Other	Total	To Govt	Other	Total	
			\$	'000			
1964-65	4 069	27 235	31 304	103	1 443	1 546	
1965-66(a)	6 185	31 160	37 345	256	1 674	1 931	
1966-67	7 368	36 350	43 718	324	1 980	2 305	
1967-68	7 380	42 079	49 459	337	2 323	2 660	
1968-69	6 9 5 6	47 479	54 435	316	2 645	2 961	
1969-70	6 637	54 389	61 025	290	3 106	3 396	
1970-71	6 9 1 4	62 198	69 112	304	3 719	4 023	
1971-72	6 798	69 007	75 806	300	4 240	4 539	
1972-73	6 581	74 951	81 535	289	4 627	4 915	
1973-74	4 639	82 119	86 758	203	5 261	5 465	

<sup>(</sup>a) From 1965-66 includes South-Western Suburbs Drainage Scheme.

<sup>(</sup>b) From 1965-66 includes South-Western Suburbs Drainage Scheme.

# Local Government Authorities: Debt Outstanding According to Rate of Interest and Purpose, South Australia At 30 June 1974

Debt	Purpose	Debt
\$'000		\$'000
789	Light and power	2 882
1 317	Water supply, sewerage and	
11 463		15 455
28 147	Roads, streets, bridges and	
18 569	footpaths	35 420
2 454	Council properties	23 065
18 727	Parks, gardens and recrea-	
5 195	tional reserves	7 613
95	Other (including not stated)	2 322
86 758	Total debt	86 758
	\$'000 789 1 317 11 463 28 147 18 569 2 454 18 727 5 195 95	\$'000 789 Light and power 1 317 Water supply, sewerage and 11 463 drainage (a) 28 147 Roads, streets, bridges and 18 569 2 454 Council properties 18 727 Parks, gardens and recreational reserves 95 Other (including not stated)

<sup>(</sup>a) Includes South-Western Suburbs Drainage Scheme.

### **BUSINESS UNDERTAKINGS**

Some local authorities operate electricity undertakings, water supply services and quarries. Expenditures by authorities for goods and services supplied by their business undertakings are included both in expenditures from general, etc. funds and in income of the business undertakings. Loan raisings and subsequent expenditures are included under Loan Fund income and expenditure.

# Local Government Authorities Business Undertakings Income and Expenditure South Australia, 1973-74

Current account transactions (a):  Electricity undertakings;  Current income.	\$'000
Electricity sales	
Other 413	
Total current income	1 948
Current expenditure,	
Generation and distribution 829	
Purchase of electricity 672 Debt services,	
Interest 164	
Principal redeemed 144	
Administration and other 411	
Total current expenditure	2 219
Deficit	271

# Local Government Authorities Business Undertakings Income and Expenditure South Australia. 1973-74 (continued)

Other (b); Current income	71 77	
Deficit		7
Deficit (all undertakings)	•	278
Capital account transactions (c):  Expenditure on construction or purchase of assets;  Electricity undertakings	56	
Total capital expenditure (c)		56

- (a) Transactions relating to construction or purchase of capital assets are not taken into account in arriving at surplus or deficit.
- (b) Comprises quarry and water supply undertakings.
- (c) Excludes loan fund transactions.

# 11.6 AUSTRALIAN NATIONAL ACCOUNTS

National accounting aims at providing a systematic summary of the transactions taking place in the economy, especially of those that relate to the production and use of goods and services, and to transfers of income or capital between sectors of the economy.

#### Concepts

The fundamental concepts of domestic product and national income and expenditure are described below.

Gross Domestic Product at Market Prices (usually referred to as Gross Domestic Product) is defined as the total market value of goods and services produced in Australia after deducting the cost of goods and services used up in the process of production but before deducting allowances for the consumption of fixed capital. It is the sum for all producers of the value of their sales (including any indirect taxes levied thereon), plus increases in their stocks, less their purchases of intermediate goods and services from other producers. For those producers, like general government, who do not generally sell their output, it includes output valued at cost instead of sales.

Gross Domestic Product at Factor Cost is that part of the cost of producing the Gross Domestic Product which consists of gross payments to factors of production (labour, land, capital and enterprise). It represents the value added by these factors in the process of production and is equivalent to Gross Domestic Product less indirect taxes plus subsidies. Gross Farm Product at Factor Cost is that part of Gross Domestic Product at Factor Cost arising from production in rural industries.

Domestic Factor Incomes is that part of the value added within a given period by factors of production which accrues as income to their suppliers after allowing for the depreciation of fixed capital. It is equivalent to Gross Domestic Product at Factor Cost less depreciation allowances.

National Income is the net income accruing within a given period to Australian residents from their services in supplying factors of production in Australia or overseas plus indirect taxes less subsidies. It is equivalent to Domestic Factor Incomes plus indirect taxes less subsidies and net income paid overseas. It is also equivalent to Gross Domestic Product less depreciation allowances and net income paid overseas.

National Disposable Income is the net income accruing within a given period to Australian residents from their services in supplying factors of production, from net indirect taxes and from re-distributive transfers. It is equivalent to National Income less net transfers overseas.

National Turnover of Goods and Services is the total flow within a given period of final goods and services (i.e. excluding any goods and services used up during the period in the process of production) entering the Australian economy from production and imports. This value is equivalent to Gross Domestic Product plus imports of goods and services or, alternatively, to Gross National Expenditure plus exports of goods and services.

Gross National Expenditure is the total expenditure within a given period on final goods and services (i.e. excluding goods and services used up during the period in the process of production) bought by Australian residents. It is equivalent to Gross Domestic Product plus imports of goods and services less exports of goods and services.

#### Sectors

A brief description of the sectors into which the economy is divided for the purpose of National Accounts follows.

The Corporate Trading Enterprise Sector includes companies and public enterprises other than financial enterprises. It thus includes all trading enterprises other than unincorporated enterprises and dwellings owned by persons. This sector comprises only resident enterprises, but the concept of resident enterprises includes Australian subsidiaries and branches of overseas-owned companies and excludes overseas subsidiaries and branches of Australian companies. All public trading enterprises are included in this sector whether they are incorporated bodies or not.

The Financial Enterprise Sector includes both private and public financial enterprises. Financial enterprises are enterprises which are primarily engaged in financial transactions in the market consisting of both incurring liabilities and acquiring financial assets. These are organisations which are regarded as providing the financial mechanism for the functioning of the economy. They include life insurance and general insurance offices and superannuation funds as well as other organisations mainly engaged in borrowing and lending in the market.

The Household Sector includes all resident persons, their unincorporated enterprises located in Australia and dwellings owned by persons, and non-profit organisations serving households, other than non-profit organisations included in the Financial Enterprises Sector.

The General Government Sector excludes public financial and trading enterprises, but otherwise includes the whole of the activities of the Australian Government, State Governments, local authorities and public corporations.

The Overseas Sector account records all transactions between Australian persons, businesses and governments and overseas residents. Australian subsidiaries and branches of overseas companies are classified as resident units, while overseas subsidiaries and branches of Australian companies are classified as non-residents.

## Description of the Accounts

The Domestic Production Account is shown as receiving the revenue from the sale of goods and services to final buyers; all intermediate goods and services are cancelled out, since they represent a cost to one producer to offset the revenue of the other. On the payments side are shown the payments of indirect taxes less subsidies and, since the account is presented from the point of view of the producing unit, the wages and salaries paid to employees.

The National Income and Outlay Account is shown as receiving wages, salaries and supplements, net operating surplus and indirect taxes less subsidies from the Domestic Production Account. From this income are deducted net payments of income and miscellaneous transfers to overseas, and the remainder is the National Disposable Income. The outlay side of the account shows this disposable income is largely used for final consumption expenditure and the balance is the nation's saving. The National Income and Outlay Account is a consolidation of the sector income and outlay accounts.

The National Capital Account is a consolidation of the sector capital accounts. It shows on the receipts side depreciation allowances transferred from the Domestic Production Account and saving transferred from the National Income and Outlay Account (or from the sector income and outlay accounts). On the payments side are shown purchases by all sectors of new buildings and capital equipment, the increase in stocks of all sectors and a balance described as net lending to overseas. This concept of net lending to overseas includes the increases (and, negatively, decreases) in Australia's overseas monetary reserves. The net lending to overseas is also the balance on current transactions in the Overseas Transactions Account.

The Overseas Transactions Account records all transactions of a current nature between Australian and overseas residents. Although this is an account for the Overseas Sector, the items are named from the Australian viewpoint. The account shows that Australia's current receipts from overseas consist of the value of (Australia's) exports of goods and services, property income received from overseas and transfers from overseas. These receipts are used for (Australia's) imports of goods and services and payments of property income and transfers to overseas; and the balance of current receipts represents net

lending to overseas. Positive net lending to overseas corresponds to a surplus on current transactions with overseas and negative net lending corresponds to a deficit.

# Domestic Production Account, 1973-74

	\$m		\$m
Wages, salaries and supplements	27 455	Final consumption expenditure: Private	29 088 6 773
Companies Unincorporated enterprises Dwellings owned by persons Public enterprises Financial enterprises Less Imputed bank service charge		ture: Private	7 999 1 907 1 978 1 638 876 50 259 7 806
Gross Domestic Product at Factor Cost Indirect taxes less subsidies.	45 066 5 367	National turnover of goods and services	58 065 7 632
Gross Domestic Product	50 433	Expenditure on Gross Domestic Product	50 433

# National Income and Outlay Account, 1973-74

Final consumption expenditure: Private	\$m 29 088	Wages, salaries and supplements	\$m 27 455 13 957
Government	6 773 10 369	Domestic factor incomes	41 412 260 5 648 281
Disposal of Income	46 230	National Income Less Net transfers to overseas	46 519 289 46 230

# National Capital Account, 1973-74

	\$m		\$m
Gross fixed capital expendi-		Depreciation allowances	3 654
ture:		Saving:	
Private:		Increase in income tax	
Dwellings	2 626	provisions	855
Other building and con-		Undistributed (company)	
struction	1 592	income	922
All other	3 781	Retained income of public	
Public enterprises	1 907	financial enterprises	238
General government	1 978	Household saving	5 311
Commission School	1 2 7 0	General government sur-	
Increase in stocks:		plus on current trans-	
Farm and miscellaneous	718	actions	2 956
Private non-farm	920	General government grants	2,50
Statistical discrepancy	876	for private capital pur-	
Net lending to overseas	-375		87
14ct lending to overseas	-3/3	poses	
Gross accumulation	14 023	Finance of gross accumulation	14 023
	2.020	1 manes of Bross assumances	

# Overseas Transactions Account, 1973-74

Exports of goods and services Property income from overseas		Imports of goods and services Property income to overseas Personal transfers overseas General government transfers overseas Net lending to overseas	\$m 7 632 666 214 289 -375
Current receipts from overseas	8 426	Use of current receipts	8 426

The next three tables give details for South Australia of farm income, household income, and private final consumption expenditure respectively for the years 1969-70 to 1973-74.

# Farm Income, South Australia

Particulars	1969-70	1970-71	1971-72	1972-73	1973-74
Gross value of farm production:			\$ million		
Wool (including skin wool) Other pastoral products Wheat Other grain crops Other crops Dairying, poultry, etc.	79 83 27 76	66 80 41 40 85 59	86 90 76 47 92 65	165 134 44 32 103 65	*
Total	409	371	456	543	782

# Farm Income, South Australia (continued)

Particulars	1969-70	1970-71	1971-72	1972-73	1973-74
			\$ million		
Less: Stock valuation adjustment Less: Production costs other than wages and depreciation:	—2	1	7	16	
Marketing costs	46 34 96	36 32 94	45 32 100	41 48 106	} 231
Gross farm product at factor cost  Less: Depreciation	235 50	208 50	272 49	332 50	551 } 144
paid and third party insurance transfers	61	65	64	71	}
Farm income	124 5	93	159 3	211 6	407 9
Income of farm unincorporated enterprises	119	93	156	205	398

# Household Income, South Australia

Particulars	1969-70	1970-71	1971-72	1972-73	1973-74
			\$ million		
Wages, salaries and supplements Income of farm unincorporated	1 407	1 588	1 790	2 009	2 532
enterprises	119	93	156	205	398
enterprises	176	181	207	232	265
Income from dwellings	45	47	58	72	79
Transfers from general government	158	180	210	256	315
All other income	210	220	244	284	345
Total household income	2 115	2 309	2 665	3 058	3 934
Less:					
Income tax payable	241	257	321	349	*
Other direct taxes, fees, fines, etc.	33	33	39	42	*
Consumer debt interest Transfers overseas	20	33	39	47	*
Household disposable income	1 812	1 986	2 266	2 620	*

Private Final Consumption Expenditure, South Australia

Particulars	1969-70	1970-71	1971-72	1972-73	1973-74
			\$ million		
Food	330	350	384	434	493
Cigarettes and tobacco	45	51	55	64	71
Alcoholic drinks	103	115	128	132	148
Clothing, etc	151	166	179	206	245
Health	99	115	135	152	165
Rent	175	195	223	257	299
Gas, electricity, fuel	39	42	45	47	53
Household durables	126	140	161	183	234
Newspapers, books, etc	23	26	29	31	38
All other goods n.e.i	66	73	82	92	110
Travel and communication	264	291	317	347	411
All other services	175	190	219	255	297
Total	1 596	1 754	1 957	2 200	2 564

The information included in this section has been derived from the publication, Australian National Accounts, National Income and Expenditure, 1973-74, published by the Australian Statistician, Canberra.

PART 12

# PRIVATE FINANCE

# 12.1 BANKING AND CURRENCY

#### BANKING

The banking system in Australia comprises a central bank (the Reserve Bank of Australia); thirteen trading banks (one owned by the Australian Government, three by State Governments, and nine privately owned); the Commonwealth Development Bank and the Australian Resources Development Bank Ltd (specialist banks, owned respectively by the Australian Government and a consortium of the seven major trading banks); and thirteen savings banks of which one is owned by the Australian Government and three by State Governments, two are trustee savings banks, and seven are associated with privately owned trading banks.

#### LEGISLATION

Under Section 51 of the Constitution Act the Australian Parliament has power to legislate with respect to 'Banking, other than State banking; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money'.

The principal Acts at present in force relating to banking are:

- (a) The Reserve Bank Act 1959-1973, providing for the constitution and management of the Reserve Bank and the management of the Australian note issue;
- (b) The Commonwealth Banks Act 1959-1974, providing for the constitution and management of the Commonwealth Banking Corporation; and
- (c) The Banking Act 1959-1974, providing for the regulation of banking and the protection of the currency and public credit of Australia.

The Banking Act 1959-1974 applies to all banks operating in Australia or its Territories, except State banks trading in their own State. Following an amendment in 1973 the Banking Act ceased to apply to Papua New Guinea. The objects of the Act are: (1) to provide a uniform legal framework for regulating the banking system; (2) to safeguard depositors from loss; (3) to provide for the co-ordination of banking policy under the direction of the Reserve Bank; (4) to control bank interest rates and the volume of credit in circulation; (5) to mobilise and to provide machinery for the control of foreign exchange and gold reserves of the Australian economy.

State banking legislation relates to the incorporation of banks and the constitution and management of State Banks. South Australian Acts at present in force relating to banking are the State Bank Act, 1925-1975 and the Savings Bank of South Australia Act, 1929-1975.

#### THE RESERVE BANK

The Reserve Bank of Australia functions as a central bank, controls the Australian note issue through the Note Issue Department, provides special banking facilities through the Rural Credits Department, and acts as banker to the Australian Government and some of the States. Liabilities and assets of each department of the Reserve Bank are shown in the table below.

Reserve Bank of Australia, Liabilities and Assets at 30 June 1975

Particulars	Central Bank Department	Note Issue Department	Rural Credits Department	Total
		Liabiliti	es (\$'000)	
Capital	40 000 5 568	_	9 428 13 201	49 428 18 769
International Monetary Fund Special Drawing Rights Development fund Notes on issue Deposits, bills payable and	206 982 — —	 2 545 103	<u>1</u> 142	206 982 1 142 2 545 103
other: Statutory reserve deposits Other trading bank deposits Savings bank deposits Other	37 791 908 038	  25 345	  179 620	417 895 37 791 908 038 (a) 1 539 675
Total	4 514 130	2 570 448	203 390	(a) 5 724 822
Gold and balances held		Assets	(\$'000)	
abroad (b)	2 976 670 120 504	177 548 62 594		3 154 218 183 098
securities	593 888 823 067	633 835 1 696 472	203 390	1 227 723 (a) 1 159 783
Total	4 514 130	2 570 448	203 390	(a) 5 724 822

<sup>(</sup>a) Inter-departmental accounts totalling \$1 563 146 000 have been offset in totals.

(b) Includes IMF Special Drawing Rights.

Further details of the activities of the Reserve Bank are given in the Official Year Book of Australia.

# THE COMMONWEALTH BANKING CORPORATION

The Commonwealth Banking Corporation was established under the Commonwealth Banks Act 1959 and commenced operations on 14 January 1960. It is the controlling body for the Commonwealth Trading Bank, the Commonwealth Savings Bank and the Commonwealth Development Bank.

Particulars relating to the Development Bank are given below, while details of the other two banks are included in later sections relating to trading banks and savings banks.

#### COMMONWEALTH DEVELOPMENT BANK

The Development Bank is a supplementary source of finance for primary production and for the establishment or development of industrial undertakings and does not compete with conventional lenders, but provides financial help when such help is thought desirable and finance is not otherwise available on suitable terms. The primary consideration of the Bank's operations in deciding whether finance should be made available is the prospect of success and not necessarily the value of security available.

In South Australia all the major private banks and the State Bank of South Australia are agents of the Development Bank for the receipt of loan applications. The averages of weekly figures for loans, advances and bills discounted for the month of June in the years 1972 to 1975 were \$294, \$295, \$307 and \$345 million respectively. Of the last mentioned amount, \$32.8 million was advanced in South Australia.

At 30 June 1975 the capital of the Development Bank was \$61.7 million.

#### AUSTRALIAN RESOURCES DEVELOPMENT BANK LIMITED

This corporation was formed by the major trading banks with the support of the Reserve Bank and was given bank status by an amendment to the Banking Act in 1967. It provides finance for the development of Australia's natural resources mainly in the form of refinanced trading bank loans but also by direct lending and equity participation. Other services offered to intending developers include the organising of consortia financing, assessments of feasibility and independent verification of reserves. The averages of weekly figures for loans and advances outstanding for the month of June in the years 1972 to 1975 were \$328, \$294, \$351 and \$449 million respectively. This finance is provided from the Australian capital market (mainly in the form of public issues of transferable deposits) and from subordinated loans by the shareholding banks and the Reserve Bank of Australia. Overseas borrowing remains a minor source of funds.

Authorised capital of the Bank is \$10 million of which \$7 million (at 30 September 1975) has been issued as fully paid capital. The shareholders (the major trading banks) have approximately equal shareholdings. Although not a shareholder, the Reserve Bank of Australia initially subscribed \$2.1 million in loan capital on which interest is paid.

#### TRADING BANKS

For statistical purposes trading banks are often divided into two groups, 'major' and 'other'. The 'major trading banks' comprise the six private trading banks and the Commonwealth Trading Bank, all of which have interests throughout Australia: in June 1975 they accounted for approximately 90 per cent of all general trading bank assets in Australia.

The group 'other trading banks' consists of the three State Government banks (including the State Bank of South Australia) which trade mainly in their respective States, and three other banks (two of them overseas institutions) whose business is either specialised (e.g. financing overseas trade), or both specialised and limited to particular areas.

### Banks Originating in South Australia

With a subscribed capital of \$500 000 in 50 000 shares of \$10 each, the first trading bank promoted in South Australia was The Bank of Adelaide which was opened for business on 11 December 1865 and now has branches in all States and the Australian Capital Territory.

Pursuant to the State Advances Act of 1895 the State Bank of South Australia commenced business in 1896. The original Act directed that advances were to be made on first mortgage to farmers, other primary producers and local government authorities. In 1925 legislation was enacted which enlarged the scope of the activities of the bank by making provision for loans on overdraft and all business of general banking. The State Bank also administers the following Acts on behalf of the State:

Advances for Homes Act, 1928-1972;

Advances to Settlers Act, 1930-1972;

Loans to Producers Act, 1927-1962;

Advances for wire-netting and vermin proof materials under the Vermin Act, 1931-1973;

Loans for Fencing and Water Piping Act, 1938-1973;

Student Hostels (Advances) Act, 1961.

The State Bank of South Australia does not operate branches or agencies outside the State.

#### Assets

Under the provisions of the Banking Act 1959-1974 all trading banks (except State banks trading in their own State) have limitations on their portfolio of assets. These banks are required to hold a certain percentage of total deposits in the form of liquid assets or government securities (this minimum LGS ratio has remained at 18 per cent since 1962). They are also required to maintain a fixed percentage of total deposits as a deposit with the Reserve Bank (Statutory Reserve Deposit): this SRD ratio for major trading banks was increased to 4.0 per cent on 16 July 1975, decreased to 3.6 per cent on 17 July 1975 and increased to the level of 4.6 per cent of deposits on 5 August 1975.

The following table gives some particulars of assets held by trading banks in Australia. The figures quoted are averages of assets at the close of business on each Wednesday in June 1975.

Trading Banks: Assets within Australia, June 1975(a)

Assets	Major Trading Banks	Other Trading Banks	All Trading Banks
		\$'000	
Gold, bullion and Australian notes	278 587	15 557	294 144
Cash with Reserve Bank	3 637	1 235	4 872
Australian public securities: Australian Government and State	3 304 891	221 790	3 526 681
Local authorities and public corporations	16 384	14 810	31 194
Statutory Reserve Deposit Account with	10 304	14 010	J1 1/4
Reserve Bank	414 444	6 915	421 358
Loans to authorised dealers in short-term		0,10	122 000
money market	118 150	49 240	167 390
Other loans, advances and bills discounted	. 9 932 251	1 272 773	11 205 024
Bank premises, furniture and sites	218 710	46 359	265 069
Other assets	1 904 813	152 931	2 057 745
Total assets	16 191 867	1 781 610	17 973 477

<sup>(</sup>a) Excludes inter-branch accounts and contingencies.

#### **Branches and Agencies**

Of the thirteen trading banks which operate in Australia, the eight banks listed below conduct business in South Australia:

## Government banks;

Commonwealth Trading Bank of Australia State Bank of South Australia

#### Private banks;

Australia and New Zealand Banking Group Ltd
The Bank of Adelaide
Bank of New South Wales
Commercial Bank of Australia Ltd
Commercial Banking Co of Sydney Ltd
National Bank of Australasia Ltd

# Trading Banks: Branches and Agencies at 30 June, South Australia

			Branche	es	Agencies		
Bank		1973	1974	1975	1973	1974	1975
Commonwealth Trading Bank State Bank of South Australia Private banks		35	51 36 349	54 36 355	49 16 149	47 16 138	46 16 114
Total—Metropolitan area (a) Country			228 208	239 206	106 108	92 109	71 105
Total State		426	436	445	214	201	176

<sup>(</sup>a) As determined by individual banks for administrative purposes.

In 1974-75 there was an increase in the number of branches of trading banks in the metropolitan area which exceeded the reduction in the number of branches in the country area. However, there was a decrease in the number of agencies in both the metropolitan and country areas during 1974-75.

## Deposits, Advances and Debits to Customers Accounts

Deposits not bearing interest are on current account and may be withdrawn on demand. Deposits bearing interest include some deposits on current account, but most are deposits for fixed terms ranging from three months to four years and for large amounts from thirty days to four years. Until December 1970 the maximum term for fixed deposits was two years.

During the ten-year period from 1965-66 the proportion of deposits bearing interest rose from 47·3 per cent to a peak of 64·4 per cent in 1974-75.

Loans and advances exceeded deposits in two years during the 1930s but because of a reduction in advances made during the 1939-45 War coupled with a rapid increase in deposits, the proportion of loans and advances to total deposits dropped to a low of approximately 30 per cent in the late 1940s. In the ten years 1965-66 to 1974-75, this percentage rose from 71.2 per cent to a peak of 91.7 per cent in 1970-71 and fell to 76.3 per cent in 1974-75.

Debits to customers accounts generally represent the total of all cheques drawn by customers of the banks.

Trading	Banks:	Balance	of	Deposits	and	Advances	and	Debits	to
	C	ustomers	A	counts.	South	Australia			

	Depos	sitors Balance	es (a)	Loans, Debits to			
Year	Bearing Interest	Not Bearing Interest	Total	and Bills Discounted (a) (b)	Accounts (c)	Accounts	
			\$'000			Per	cent
1970-71	225 318	206 547	431 863	396 183	269 835	52.2	91.7
1971-72	251 057	218 926	469 983	419 682	293 329	53.4	89-3
1972-73	298 161	265 511	563 670	470 070	336 581	52.9	83.4
1973-74	427 839	321 344	749 182	585 505	414 861	57-1	78-2
1974-75	581 107	320 751	901 858	688 337	456 883	64.4	76.3

<sup>(</sup>a) Average of balances at close of business on Wednesdays during the period.

<sup>(</sup>b) Excludes loans to authorised dealers in the short-term money market.

<sup>(</sup>c) Weekly average, i.e. average of debits during weeks ending on Wednesdays in the period. Includes the Rural Credits Department of the Reserve Bank and the Commonwealth Development Bank.

Separate details for 1974-75 for each of the Government banks and for all private banks are as follows.

Trading Banks: Balance of Deposits and Advances, South Australia, 1974-75(a)

Bank -	De	Depositors' Balances				
Daux -	Bearing Interest	Not Bearing Interest	Total	- and Bills Discounted (b)		
		\$'00	00			
Commonwealth Trading Bank State Bank of South Australia Private trading banks	102 586 46 579 431 943	51 403 18 455 250 894	153 988 65 033 682 836	95 241 208 037 385 059		
Total	581 107	320 751	901 858	688 337		

<sup>(</sup>a) Average of balances at close of business on Wednesdays during the period.
(b) Excludes loans to authorised dealers in the short-term money market.

The following table relates to trading bank advances outstanding for all banks in South Australia and the Northern Territory except the State Bank of South Australia. Advances are classified according to type of borrower in July of each year from 1971 to 1975.

Major Trading Banks, South Australia and Northern Territory
Advances to Resident Borrowers by Type of Borrower(a)

(At Second Wednesday in July)

1971	1972	1973	1974	1975
		s million		
72.1	75.3	79.9	06.4	91.8
				66.7
				9.9
15.1	15.6	15.7	27·4	21.5
29.4	30-3	33.5	37.3	42.1
19.5	14.6	20.8	23.9	21.7
49.0	44.9	54.3	61.2	63.8
9.7	11-1	18.2	10.2	21.3
				81.9
2.6	2.3	2.5	2.9	5.4
229-2	241.0	282.0	354-3	362.3
120.5	126.6	148-4	195.8	199-2
				163.1
	78·1 35·9 6·5 15·1 29·4 19·5 49·0 9·7 32·4 2·6	78·1 75·3 35·9 47·7 6·5 5·3 15·1 15·6 29·4 30·3 19·5 14·6 49·0 44·9 9·7 11·1 32·4 38·8 2·6 2·3 229·2 241·0	\$ million  78·1 75·3 78·8 35·9 47·7 43·2 6·5 5·3 8·4 15·1 15·6 15·7  29·4 30·3 33·5 19·5 14·6 20·8  49·0 44·9 54·3  9·7 11·1 18·2 32·4 38·8 61·0 2·6 2·3 2·5  229·2 241·0 282·0	\$ million  78·1 75·3 78·8 86·4 35·9 47·7 43·2 65·2 6·5 5·3 8·4 12·3 15·1 15·6 15·7 27·4  29·4 30·3 33·5 37·3 19·5 14·6 20·8 23·9  49·0 44·9 54·3 61·2  9·7 11·1 18·2 19·8 32·4 38·8 61·0 78·9 2·6 2·3 2·5 2·9  229·2 241·0 282·0 354·3

# Major Trading Banks, South Australia and Northern Territory Advances to Resident Borrowers by Type of Borrower(a) (At Second Wednesday in July) (continued)

Classification	1971	1972	1973	1974	1975
			\$ million		
Advances to public authorities Personal advances:	0.7	0∙7	1.1	1.4	1.6
Building or purchasing own home Other	17·4 34·0	21·8 43·1	30·9 77·6	40·4 105·8	40·7 141·8
Total personal advances	51.3	64.9	108.5	146·1	182.5
Advances to non-profit organisations	3.0	2.9	3.3	5.4	3.8
Total advances to resident borrowers	284-3	309-6	394.9	507.2	550-2

<sup>(</sup>a) Covers advances by the Commonwealth Trading Bank and all private trading banks, but excludes advances by the State Bank of South Australia. 'Resident borrowers' comprise all institutions (including branches of overseas institutions) engaged in business in Australia and individuals permanently residing in Australia.

# Interest Rates

The following table shows trading banks interest rates current at 30 September 1975, the dates from which they became operative and the rates which were applicable before those dates.

Trading Banks, Interest Rates at 30 September 1975

Particulars	Rate per Annum	Date from which Operative	Previous Rate per Annum
	%	LENDING RATES	%
Overdraft:	, •		, ,
Under \$50 000 (a)	11.50	9.7.74	9.50
\$50 000 and over	(b)	17.9.73	(b)
Unsecured personal loans (a) (c)	8·25	9.7.74	7.25
Onsocured personal round (a) (b)		DEPOSIT RATES	
Fixed deposits (less than \$50 000):		221 0211 141123	
3 months and less than 6 months	7.75-9.00	August 1975	8.00-9.00
6 months and less than 24 months	8.25-9.50	Feb. 1975	9.00-9.50
24 months and less than 48 months	8.00-9.50	March 1975	9.00-9.50
Fixed deposits (\$50 000 and over) (a) (b):	0 00 7 50	1/141011 17/3	7 00 7 50
30 days to 4 years	10.00	9.7.74	8.00
Certificates of deposit (\$50 000 and over) (b):	10 00	2.1.14	0 00
3 months to 48 months	(d)	17.9.73	6.50
5 months to to months	(4)	11.7.73	0 50

 <sup>(</sup>a) Maximum rate.
 (b) Actual rates are a matter for negotiation between banks and their customers.
 (c) Flat rate.
 (d) Not subject to maximum rate.

<sup>(</sup>b) Includes farm development loan component.(c) Includes temporary advances to woolbuyers.

Bank interest rates are not formally determined under the Banking Act. Maximum rates are fixed after discussions between the Reserve Bank and the banks, and with the approval of the Treasurer. State Government banks, although not bound by rulings of the Reserve Bank, tend to conform to them.

#### SAVINGS BANKS

#### Savings Bank of South Australia

The Savings Bank of South Australia commenced operations on 11 March 1848 following the enactment of an ordinance in 1847. At 30 June 1975 there were 142 branches, 726 agencies and 838 school bank agencies within South Australia. The Savings Bank of South Australia does not operate branches in other Australian States but has agent banks to act for it in other States and in the United Kingdom. Since April 1974 a resident officer has been located in London.

The total of depositors' balances first exceeded \$200 million in 1956, reached \$400 million in July 1969 and at 30 June 1975 amounted to more than \$697 million. During the year 1974-75 the Bank made loans exceeding \$69.2 million to depositors for housing, for rural development and for institutional and other purposes and at 30 June 1975 the total of such loans outstanding was over \$257 million.

## Savings Bank of South Australia, Summary of Business

Year	Operative Accounts (a)	Cash Turnover (b)	Depositors' Balances (a)	Loans (a) (c)	Government Securities Held (a) (d)
1970-71	No.	\$m	\$'000	\$'000	\$'000
	944 040	1 147	438 793	269 449	141 225
	962 023	1 351	469 607	287 633	143 652
	977 345	1 693	537 953	310 282	140 000
	1 007 671	2 262	591 822	341 853	157 713
	1 064 468	3 037	697 458	396 453	166 865

## **Development of Savings Banks**

The prime object of the foundation of savings banks in Australia was the encouragement of thrift, and deposits as small as 10 cents are still accepted. Generally, depositors cannot operate on their savings accounts by means of cheques, although most savings banks extend this facility to non-profit organisations such as friendly, co-operative and charitable societies. In addition the

<sup>(</sup>a) At end of year, as published in the Bank's Annual Report.
(b) Sum of deposits and withdrawals; includes some duplication from amounts transferred by depositors from one type of account to another.

<sup>(</sup>c) Includes loans guaranteed by South Australian Government and to statutory and local government

<sup>(</sup>d) Australian Government Securities only.

Savings Bank of South Australia provides personal cheque account facilities for other depositors. Savings accounts have the advantages that deposits may be withdrawn on demand and that depositors receive interest on their minimum monthly balances. No charge is made by the banks for keeping these accounts or the cheque accounts of some non-profit organisations. However, early in 1970 concessions relating to charges and interest on trading accounts were withdrawn from hospital and medical benefit organisations, building societies, credit unions and investment clubs. Savings Banks may not accept deposits from a profit making body unless it is acting as a Trustee for a non-profit making beneficiary.

Post Offices in South Australia acted as agencies for the Savings Bank of South Australia until 1912 when they became agents of the Commonwealth Bank from the date of its establishment.

Savings bank business was conducted exclusively by these two government banks until 1956, when the first of the private banks entered this field. Savings bank facilities in South Australia are now provided by the eight banks listed below:

## Government;

Commonwealth Savings Bank of Australia Savings Bank of South Australia

#### Private:

Australia and New Zealand Savings Bank Ltd The Bank of Adelaide Savings Bank Ltd Bank of New South Wales Savings Bank Ltd Commercial Savings Bank of Australia Ltd CBC Savings Bank Ltd National Bank Savings Bank Ltd

#### Assets

Under the provisions of the Banking Act 1959-1974 all savings banks (except State banks trading in their own State) are required to maintain in prescribed investments an amount that together with cash on hand in Australia is not less than the amount on deposit in Australia with the savings bank. These prescribed investments include deposits with the Reserve Bank, deposits with or loans to other banks, Australian Government or State securities, loans for housing, loans to authorised dealers in the short-term money market and loans to the Australian Banks Export Refinance Corporation Ltd.

A further limitation on the portfolio of assets held by savings banks is that they are required to hold in cash and other prescribed assets, funds equivalent to 50 per cent of depositors balances. Within this amount, funds equivalent to 7.5 per cent of depositors balances must be held in deposits with the Reserve Bank and in Treasury notes. These ratios were previously 60 and 10 per cent respectively, and were varied by an amendment to the Banking (Savings Banks) Regulations on 12 September 1974.

## Branches and Agencies

The number of branches of savings banks increased in 1974-75 for the second time since 1969-70 because of an increase in the number of branches of private banks in the metropolitan area. However the number of agencies of savings banks decreased in each of the years 1968-69 to 1974-75 mainly because of a reduction in the number of private savings bank agencies.

Savings Banks: Branches and Agencies at 30 June, South Australia

Bank	Branches			Agencies		
Balik	1973	1974	1975	1973	1974	1975
Commonwealth Savings Bank Savings Bank of South Australia Private Banks	139	78 140 349	78 142 355	720 750 640	688 745 560	671 726 511
Total—Metropolitan area (a) Country	315 244	322 245	330 245	1 374 736	1 318 675	1 254 654
Total State	559	567	575	2 110	1 993	1 908

<sup>(</sup>a) As determined by individual banks for administrative purposes,

#### **Deposits**

Until 1961, the total of depositors' balances in savings banks per head of population was higher in South Australia than in any other State. Although deposits per head are now higher in Victoria than in South Australia, the figure for this State is still well above the Australian average.

Savings Banks: Accounts and Deposits, South Australia and Australia

A.4	S	South Austra	lia	Australia			
At - 30 June	Accounts Operative (a)	Depositors' Balances	Deposits per Head of Population	Accounts Operative (a)	Depositors' Balances	Deposits per Head of Population	
	'000	\$m	\$	'000	\$m	\$	
1971 1972 1973 1974 1975	1 623 1 705 1 770 1 861 1 991	787·9 874·1 1 060·4 1 174·8 1 394·6	672 737 884 964 1 125	16 019 16 726 17 468 18 369 19 390	7 634·5 8 391·4 10 237·9 11 195·6 12 790·4	600 648 780 839 943	

<sup>(</sup>a) Excludes school bank and inoperative accounts.

The Savings Bank of South Australia has always held a very high proportion of the total of depositors' balances in this State, although its share of total on deposit has dropped from about 75 per cent in 1961 to approximately 50 per cent in 1975. During that time the private banks have increased their share from less than 12 per cent to approximately 27 per cent.

Savinos	Rank	Denosite	South	Australia
очущев	Dank	Deposits.	Soum	Austrana

At 30	) June	Commonwealth Savings Bank	Savings Bank of South Australia	Private Savings Banks	Total
			\$ mil	llion	
1971		180.2	438-8	168.9	787-9
1972		203.5	469.6	201.0	874-1
1973		248.8	538⋅0	273.7	1 060.4
1974		276.6	591.8	306.4	1 174.8
1975		322.9	697.5	374.2	1 394.6

The next table gives an indication of the amount of business conducted by savings banks during a year. It shows that in each of the last five years, both the amount deposited and the amount withdrawn during the year exceeded the total amount on deposit at the end of the year.

## Movements in Savings Bank Deposits, South Australia

Year	Amount on Deposit at Beginning of Year	Deposits during Year (a)	Withdrawals during Year (a)	Interest Added during Year	Increase in Depositors' Balances during Year	Amount on Deposit at End of Year
			\$ millio	n.		
1970-71 1971-72 1972-73 1973-74 1974-75	733·1 787·9 874·1 1 060·4 1 174·8	1 193·8 1 400·2 1 841·7 2 392·2 3 135·6	1 167·5 1 345·0 1 691·3 2 325·1 2 982·0	28·5 31·1 35·8 47·4 66·2	54·8 86·2 186·3 114·5 219·8	787·9 874·1 1 060·4 1 174·8 1 394·6

<sup>(</sup>a) Includes inter-branch transfers.

#### Interest Rates

On 19 March 1974 the Reserve Bank removed the maximum interest bearing limit of \$20 000 on ordinary savings accounts. On 1 August 1974 the maximum interest rate payable on all ordinary savings accounts was increased from 6.25 per cent to 6.5 per cent. In practice the general rate of interest payable on ordinary savings accounts varies from 3.75 to 6.25 per cent for balances up to and including \$4 000 and is 6 per cent for the amount in excess of \$4 000. Interest is calculated on the lowest balance in an account each month.

From March 1975 the rate of interest on savings banks investment accounts has been in the range of 8 to 9 per cent. These accounts are subject to special requirements in respect of notice of withdrawal, minimum balance and minimum amounts for transactions. The maximum interest bearing limit of \$50 000 was removed on 19 March 1974.

The range of interest rates generally charged on housing loans to individuals has been in the range of 8.75 to 10 per cent since April 1975. The maximum interest rate on other loans of less than \$50 000 has remained in the range of 9.50 per cent to 11.50 per cent. Interest rates on loans of \$50 000 and over are a matter for negotiation between banks and their customers.

State Government savings banks are not bound by rulings of the Reserve Bank but are generally guided by them.

## School Banking

Special banking facilities for school children were introduced into South Australia with the inauguration of the School Banking Department of the Savings Bank of South Australia on 28 April 1908. The Commonwealth Savings Bank of Australia and some private banks provide similar services at some private schools. However, the Savings Bank of South Australia has sole access to State schools, and retains a major share of school banking business. With a view to encouraging thrift in school children, deposits as small as one cent are accepted.

Details of school banking in this State are as follows:

	Agencies	Operative Accounts	Depositors' Balances
		'000	\$'000
30 June 1971	. 872	168	3 463
1972	. 920	166	3 532
1973	908	161	3 618
1974	910	157	3 684
1975	. 902	155	3 582

#### CURRENCY

Under the Australian Constitution the control of currency, coinage and legal tender in Australia is vested in the Australian Government.

The Australian Treasurer is empowered by legislation to arrange for the making and issuing of coins of specified denominations. Australia's coin requirements are met by the Royal Australian Mint in Canberra. Australian notes are printed by the Note Printing Branch of the Reserve Bank in Melbourne, while their issue is controlled by the Note Issue Department of that bank.

At March 1975 notes in circulation were of the denominations \$1, \$2, \$5, \$10, \$20 and \$50, the last mentioned becoming available to the public on 9 October 1973. Coins in circulation were 1 cent and 2 cent (bronze) and 5, 10, 20 and 50 cents (cupro-nickel).

Minting of the 50 cent coin in its original form of 80 per cent silver and 20 per cent copper, ceased in April 1968. A twelve sided version of the 50 cent coin, in cupro-nickel, was issued in September 1969. A special 50 cent coin was issued in 1970 to commemorate the two-hundredth anniversary of Captain James Cook's discovery of the east coast of Australia.

More complete details of Australian currency, including historical references, were included on pages 552-6 of the South Australian Year Book 1968.

#### Rates of Exchange

The following table shows the average telegraphic transfer selling rates of exchange for Sydney, New South Wales, on a selection of overseas countries. The figures appearing in the table, which are averages of daily quotations, are based generally on rates quoted by the Commonwealth Trading Bank of Australia.

Overseas Exchange Rates: Average Telegraphic Transfer Selling Rates Sydney, 1972-73 to 1974-75

Country	Basis of Quotation	1972-73	1973-74	1974-75
Sri Lanka (Ceylon)	Francs to \$A1 Dollars to \$A1 New Yuan to \$A1 Dollars to \$A1 Francs to \$A1 Francs to \$A1 Francs to \$A1 Deutsche Marks to \$A1 Dutsche Marks to \$A1 Lire to \$A1 Jollars to \$A1 Dollars to \$A1 Dollars to \$A1 Dollars to \$A1 Rands to \$A1 Rands to \$A1 Rands to \$A1 Rupees to \$A1 Francs to \$A1 Bahts to \$A1 Dollars to \$A1 Dollars to \$A1	53·51 53·65 1·2683 2·72 1·051 6·049 6·123 3·853 6·936 9·735 828·00 815·00 363·49 3·924 1·030 3·375 0·9567 8·115 4·502 26·24 0·522 1·2811 1·016	57·17 56·32 1·4441 2·849 1·167 6·308 3·710 7·397 11·477 892·00 404·52 3·929 1·031 3·501 0·9765 9·560 4·471 29·54 0·614 1·4711 1·056	50-69 49-75 1-3547 2-536 1-082 6-039 3-342 6-676 10-846 878-00 401-70 3-436 1-014 3-184 0-9253 9-013 3-662 27-42 0-581 1-3675 0-983

 <sup>(</sup>a) Where two rates are quoted 'Convertible' and/or 'Commercial' rates are for trade transactions accompanied by documentation and 'Financial' rate is for other transactions.
 (b) Rates of exchange used in converting import values to Australian currency for purposes of calculating customs duty.

# 12.2 INSURANCE

### LIFE INSURANCE

The activities of life insurance companies operating in South Australia have been regulated by Australian Government legislation since 1945. Under the *Life Insurance Act* 1945-1973, every company transacting life insurance business must be registered and must lodge a deposit of up to \$100 000, as security for policy holders, with the Australian Treasurer. The Act is administered by the Insurance Commissioner who has wide powers of inquiry into the activities of any registered company.

Each company must establish at least one statutory fund and all moneys received in respect of life insurance business must be paid to, and form part of, the assets of these funds. An actuarial investigation must be conducted at least once every five years, with the distribution of shareholders dividends and policy holders bonuses subject to sufficient surplus being revealed by such investigation. All premiums must be actuarially approved and the Commissioner has powers to suppress policies or proposals which he deems misleading. Companies are required to furnish to the Commissioner certain accounting reports and statistical returns and it is from these returns that the statistical details in this section are obtained.

The individual returns cover operations for the accounting year ending in the calendar year shown. For a majority of companies the closing date is 31 December, but a number balance earlier in the year.

During 1974 there were thirty-nine companies operating in South Australia. All conducted ordinary life insurance business; thirty-one also undertook superannuation business, i.e., the issuing of policies to the trustees of funds established for the provision of superannuation or retirement benefits, and five recorded industrial business whereby premiums are collected at intervals of less than two months.

#### Policies in Force

There has been a rapid growth in life insurance business since the end of 1945 when, for policies in force, the sum assured plus bonus additions amounted to \$130 million; by 1956 the \$500 million mark was reached and by 1974 the figure was \$4 557 million.

The next table illustrates the growth in life insurance business over the last ten years. Although total business has been increasing, the number of industrial policies has actually declined and industrial premiums have risen only slowly. The heavy relative decline in this form of business has resulted from the high cost of collecting premiums and the development of superannuation and group schemes.

31 -	Ordinary			Su	perannuat	ion	Industrial (a)		
Dec.	Policies	Sum Assured	Annual Premiums	Policies	Sum Assured	Annual Premiums	Policies	Sum Assured	Annual Premiums
	No.	\$,000	\$,000	No.	\$'000	\$'000	No.	\$'000	\$'000
1965	442 451	1 029 608	28 173	43 786	182 502	6 760	289 109	82 340	3 525
1966	458 212	1 140 650	30 500	44 789	212 918	7 806	275 966	85 515	3 615
1967	477 753	1 272 160	33 383	45 243	256 144	8 947	269 364	89 808	3 761
1968	497 847	1 413 230	37 087	47 003	298 861	10 301	262 780	94 949	3 936
1969	523 417	1 588 831	41 321	48 453	341 571	11 588	257 049	101 077	4 163
1970	550 226	1 802 721	46 011	49 784	399 458	13 347	253 464	111 065	4 493
1971	580 218	2 073 174	51 801	51 275	470 677	15 882	249 993	123 800	4 894
1972	608 290	2 374 762	58 022	52 875	542 580	17 921	241 651	135 827	5 263
1973	642 956	2 757 993	63 221	52 292	658 235	20 543	237 018	149 526	5 756
1974	657 011	3 150 075	68 845	54 059	868 020	25 993	224 517	157 079	5 901

Life Insurance: Policies in Force, South Australia

<sup>(</sup>a) Includes industrial business for the Northern Territory.

In the following table the distinction between endowment insurance and an endowment policy is that endowment insurance provides for the payment of the sum assured upon the insured reaching a specified age or upon his prior death, whereas the sum assured under an endowment policy is paid only upon the insured reaching the specified age.

Life Insurance: Policies in Force, South Australia, 1974

Type of Dollar	Ord	inary	Supera	nnuation	Industrial (a)		
Type of Policy	Sum Assured	Annual Premiums	Sum Assured	Annual Premiums	Sum Assured	Annual Premiums	
	<del></del>		<u>s'</u>	000			
Whole life insurances Endowment	1 936 433	35 581	84 088		9 850	377	
insurances Other insurances	554 093 628 644				146 047	5 380 87	
Endowment	30 905		14 280		1 181	57	
Total	3 150 075	68 845	868 020	25 993	157 079	5 901	

<sup>(</sup>a) Includes industrial business for the Northern Territory.

Of the thirty-nine companies undertaking ordinary business in 1974, ten accounted for 87 per cent of business registered at the end of the year, with the five largest accounting for 73 per cent. Although thirty-one companies had superannuation policies registered, ten companies accounted for 95 per cent, and three for 66 per cent of all superannuation business.

#### **New Policies**

During 1974 a total of 75 998 new life insurance policies, with an assured value of \$908 775 000, were issued in South Australia. The value, *i.e.*, amount assured, of new policies has increased continuously since 1945.

The number and value of new ordinary, superannuation, and industrial policies issued during the five years to 1974 is shown in the next table. The relative importance of industrial policies declined from approximately 25 per cent of total value in 1945 to just below 3 per cent in 1974. The average value of industrial policies is much lower than for ordinary and superannuation policies.

Life Insurance: New Policies Issued, South Australia

Policy	1970	1971	1972	1973	1974				
	Number Issued								
Ordinary	59 174 6 227 13 690	63 576 6 494 14 281	63 668 6 555 13 978	60 229 7 020 13 629	58 082 8 706 9 210				
Total (a)	79 091	84 351	84 201	80 878	75 998				

T ifa	Insurance:	Now	Policies	Teemad	South	Anstralia	(continued)	١.
Lue	insurance:	INEW	Poncies	issueu.	20uu	Austrana	(сопинива)	,

Policy	1970	1971	1972	1973	1974
		Sum	Assured (\$	(000)	
Ordinary	319 387	388 117	440 164	526 639	584 349
Superannuation		114 596	121 193	173 089	300 011
Industrial (a)	18 081	23 166	25 306	28 270	24 416
Total (a)	437 699	525 879	586 663	727 998	908 775

<sup>(</sup>a) Includes industrial business for the Northern Territory.

Annual premiums on new policies issued in 1974 amounted to \$19 660 000 and of this amount \$6 118 000 was for endowment insurances and \$8 131 000 for whole of life insurances. Details of sum assured and premiums payable for the various types of policy issued in 1974 are shown in the following table.

Life Insurance: New Business, South Australia, 1974

Trees of Dallers	Ord	linary	Supera	nnuation	Industrial (a)					
Type of Policy -	Sum Assured	Annual Premiums	Sum Assured	Annual Premiums	Sum Assured	Annual Premiums				
	\$,000									
Whole life insurances Endowment	376 006	7 432	27 388	660	991	39				
insurances	42 216	2 179	83 960	3 192	23 143	747				
Other insurances	163 566	738	183 599	4 267	281	4				
Endowment	2 561	175	5 065	232	<del></del> .					
Total	584 349	10 524	300 011	8 351	24 416	791				
1044	304 349	10 324	500 011	0 551	24 410					

<sup>(</sup>a) Includes industrial business for the Northern Territory.

### **Annuity Business**

Life insurance companies also issue annuity policies but this form of business is at present a relatively minor aspect of life insurance activity. In 1974 there were 186 annuities in force with a total sum assured of \$81 000 a year.

#### Policies Discontinued

The following table gives details of policies discontinued according to reason for discontinuance. The item 'transfer' represents the net balance from the transfer of policies between the South Australian register and those of other States. Alterations to existing policies which result in policies being replaced, sometimes by an increased number of policies, are included in 'other'.

Life Insurance:	Policies	Discontinued	or	Reduced.	South	Australia.	1974
Lite montance.	Y OHCICS	DISCORUMUCU	OI.	Meduceu.	South	rxusu ana,	1717

D 6	Ordi	inary	Superan	nuation	Industrial (a)		
Reason for - Discontinuance	Policies	Sum Assured	Policies	Sum Assured	Policies	Sum Assured	
	No.	\$'000	No.	\$,000	No.	\$'000	
Death	2 581	7 378	199	1 953	1 459	420	
Maturity	9 907	11 080	822	4 036	12 282	2 227	
Surrender	23 129	93 803	3 121	70 472	5 577	6 569	
Forfeiture	8 246	63 294	180	2 197	4 467	9 367	
Transfer	28	-4 049	894	5 063	-2 071	-1 684	
Other	192	20 761	1 723	6 505	—3	<b>—35</b>	
Total	44 027	192 267	6 939	90 225	21 711	16 864	

<sup>(</sup>a) Includes industrial business for the Northern Territory.

#### Premiums and Claims

Details of premium income and of cash payments made in respect of policies are shown in the following table. This table does not show investment income or management and commission expenses and accordingly is not a revenue and expenditure table.

Life Insurance: Premiums and Policy Payments, South Australia

Vear	and Con-			Payments					
year siderations for Annuities		Death or Disability (a)	Maturity	Surrenders	Annuities	Cash Bonuses	Total		
				\$'000					
970 971 972 973	63 825 72 151 81 381 90 332 100 290	8 241 8 461 9 224 10 387 12 528	12 354 13 997 17 047 19 681 23 219	9 937 10 861 13 075 16 380 22 869	88 83 125 103 121	165 158 164 185 196	30 785 33 560 39 635 46 735 58 933		

<sup>(</sup>a) Includes 'Other'.

### Loans Outstanding

A considerable proportion of the assets of life insurance companies is held as loans, particularly loans on the mortgage of real estate. In the following table details are given of mortgages on South Australian real estate, loans on policies registered in, and 'other' loans to persons resident in this State. Only those loans which form assets of the statutory funds are included.

Life Insurance:	Loans	Outstanding,	South	Australia	
Nature of Collateral	1970	1971	1972	1973	1974
			\$'000		
Mortgage of real estate Policies:	83 553	80 620	81 054	79 671	83 150
Advances of premiums	4 951	3 800	4 129	4 350	4 729
Other	18 118	20 327	21 286	21 561	22 093
Other collateral	697	2 761	2 868	3 009	2 618
Total	107 318	107 507	109 338	108 590	112 591

#### GENERAL INSURANCE

General insurance in South Australia is conducted by private organisations and the State Government Insurance Commission which commenced business in January 1972. Some government insurance, in particular workmen's compensation, is carried by the State Government's Accident Insurance Office and in addition the State Bank of South Australia insures certain properties on which is has provided mortgage finance.

A number of Australian Government instrumentalities also are engaged in insurance in South Australia, notably in respect of housing loans and export payments, but these activities are not included in South Australian statistics.

Companies, persons or firms of persons carrying on general insurance business are required under the Stamp Duties Act, 1923-1975 to take out an annual licence, such licence being the authority to carry on insurance business in the State. The licence fee varies with premium income. Under the Fire Brigades Act, 1936-1974 insurance companies contribute approximately 75 per cent of the cost of maintaining the services of the Fire Brigades Board.

Insurance for workmen's compensation and motor vehicle third party risks is compulsory under State legislation. Employers, unless specifically exempted, are required under the Workmen's Compensation Act, 1971-1974 to effect an insurance cover providing compensation for workmen suffering injuries in the course of their employment. Details of workmen's compensation provisions are given in Part 7.4 pages 358-9.

Under the Motor Vehicles Act, 1959-1974 all vehicles other than those belonging to the Crown must be covered by a third party policy protecting the owner against any liability for death or injury to others resulting from use of the vehicle. Particulars are given in Part 10.4 page 556.

Legislation affecting all insurance companies operating in Australia is embodied in the *Insurance Act* 1973 which seeks to ensure the continued financial stability of these companies. This Act is concerned only with the solvency of all companies engaged in insurance business and not with contractual arrangements between policy holders and insurers or with the rate of premiums charged. It also provides for the continuation of the provisions of the State Acts referred to above. All deposits lodged with the Australian Treasurer under the *Insurance* (*Deposits*) Act 1932-1973 will eventually be returned to insurers.

The statistics in this section are compiled from returns covering transactions of the State Government Insurance Commission, the Government Accident Insurance Office, State Bank and approximately 160 companies licensed to conduct general insurance business. Each return gives details of the organisation's activities during a twelve-month period ending within the year shown. Some re-insurance transactions are excluded from the returns to avoid duplication.

The following tables show some details of revenue and expenses relating to general insurance for the years 1970-71 to 1973-74. The tables contain selected items of statistics and should not be combined and construed as profit and loss statements or revenue accounts.

The first table shows premiums and investment income earned by the companies. Premiums represent the full amount receivable in respect of policies issued and renewed in the year less returns, rebates, and bonuses, paid or credited to policy holders in the year. They are not adjusted to provide for premiums unearned at the end of the year and consequently the amounts shown differ from 'earned premium income' for the year. Premiums have increased over the period covered by the table and hence have been greater than earned premium income in each year. Investment income relates to interest, dividends, rents, etc. from investments made within the State.

General Insurance: Revenue, South Australia

	1970-71	1971-72	1972-73	1973-74
Premiums:		\$'0	000	
Fire and sprinkler leakage	6 308 1 247 200	10 374 7 226 1 342 343 2 851	10 594 8 545 1 487 181 3 204	12 398 10 420 1 679 864 3 552
Motor vehicle; Compulsory third party Other Employers' liability and workmen's	20 460	14 251 23 890	15 469 27 271	19 670 28 693
compensation	12 721 3 664 1 805 878	17 150 3 914 2 244 1 010 3 448	18 639 4 256 2 357 1 112 4 237	34 246 4 908 2 607 1 215 5 505
Total premiums Revenue from investments	75 186 834	88 043 1 129	97 352 1 326	125 756 1 717
Total	76 020	89 173	98 678	127 473

Details of claims and other expenses are given in the next table. Claims include provision for outstanding claims and represent claims incurred during the year. Other expenses mainly represent payments made during the year. Taxation payments are therefore based on income earned in previous years.

# General Insurance: Expenses, South Australia

Type of Expense	1970-71	1971-72	1972-73	1973-74
Claims:		\$'0	00	
Fire and sprinkler leakage	2 365	3 027	3 177	4 696
	1 743	2 091	2 982	3 679
	581	22	185	783
	17	265	33	1 287
	1 363	1 603	1 538	2 514
Compulsory third party Other Employers' liability and workmen's compensation Personal accident Public risk, third party Burglary Other	8 503	12 799	17 239	25 645
	14 206	16 328	17 743	21 078
	7 784	13 442	19 059	28 488
	1 544	1 600	1 835	2 056
	537	709	931	1 249
	534	642	682	657
	1 315	1 493	1 764	2 501
Total claims Other expenses: Contributions to fire brigades Commission and agent charges Management Taxation	40 491	53 978	67 168	94 635
	1 154	1 379	1 752	2 437
	7 723	8 792	9 776	11 612
	14 950	17 100	18 685	21 465
	2 434	1 936	1 839	1 355
Total expenses	66 751	83 185	99 221	131 503

# 12.3 OTHER PRIVATE FINANCE

# THE STOCK EXCHANGE OF ADELAIDE LIMITED

The Stock Exchange of Adelaide was formed in 1887 by the amalgamation of the Adelaide Stock Exchange and the Stock Exchange of South Australia. Basically the Exchange provides facilities for trading in securities, with transactions being conducted by brokers who constitute its membership. Trading was conducted on the call system until the end of 1961 when post trading came into operation.

The Exchange operates under a set of rules and regulations which govern both the behaviour of companies, through the various listing requirements, and the conduct of members. Management is by a chairman, a vice-chairman and a committee of four, elected by the members.

Lists of quotations are issued by the Exchange twice daily and lists of dividends and new issues are produced weekly. The Australian Stock Exchange Journal providing enlarged and additional information is published monthly. Transfer marking and noting services are available to members of the Exchange and to the public through solicitors and accountants. A visitors gallery overlooking the trading floor enables the proceedings to be observed.

The figures in the following table have been supplied by the Stock Exchange and show that the total market value and turnover of both industrial and mining shares have fallen considerably since 1971.

It should be noted that several companies with diverse activities, including extensive oil and/or mining interests, are classified by stock exchanges as 'industrial' and are shown in that category in the table. From 1971-72, no distinction between mining and oil companies has been made in recording turnover information.

Stock Exchange of Adelaide, Recorded Turnover of Securities

Doubless	Year Ended 30 June					
Particulars	1971	1972	1973	1974	1975	
Shares, Australian Government		Tra	insactions	('000)		
loans, public corporation loans, debentures and unsecured notes	116	61	<b>5</b> 5	43	32	
Shares:		Numbe	er of Share	s ('000)		
Industrial	22 756	20 431	19 950	17 379	14 767	
Mining	40 369 } 6 968 }	27 963	21 883	14 908	9 202	
Total shares	70 093	48 394	41 833	32 287	23 969	
Shares:		Mark	cet Value (	\$'000)		
Industrial	22 511	25 362	31 123	23 215	12 739	
Mining	43 627 \ 2 240 \}	14 011	10 780	7 072	4 354	
Total shares	68 378	39 373	41 903	30 287	17 093	
Australian Government loans, public corporation loans, debentures and unsecured notes:			\$'000			
Face value	2 701 2 477	3 256 3 165	3 698 3 720	2 232 1 972	2 339 1 892	

On 2 January 1972, the Member Exchanges of the Australian Associated Stock Exchanges (which includes Adelaide) adopted the policy of 'national listing'. This common listing meant that, at 30 June 1975, The Stock Exchange of Adelaide Limited had 1 408 companies on its Official List with a total equity market capitalisation (i.e. total market value of ordinary shares) of \$15 840 million.

#### BUILDING SOCIETIES

The operations of building societies in South Australia are regulated by the Building Societies Act, 1975 which is administered by the Registrar of Building Societies with whom all building societies must be registered. The societies fall into two categories—permanent societies and Star-Bowkett societies.

Permanent societies, which have no fixed arrangement for termination of operations, derive their funds from the issue of shares and by receiving deposits and loans. An additional source of funds for certain permanent societies has been provided by the Australian Government through the Housing Agreements and the State Grants (Housing) Act 1971-1973 (see pages 409-10). Advances for the purpose of building or acquiring homes are made to members and other persons by way of mortgage. Two permanent building societies are approved organisations in which the trustee of an estate may legally invest funds.

Starr-Bowkett societies have a limited life and derive their funds from regular subscription from members. These funds are used to make interest-free advances to members, with priority being determined by ballot. When all members have received a loan the process of winding up commences with share capital being returned to members as loans are repaid.

Building Societies: Societies. Shareholders and Borrowers. South Australia

Year	Societies		Shareh	olders	Borrowers	
	Permanent	Starr- Bowkett	Permanent	Starr- Bowkett	Permanent	Starr- Bowkett
1970-71	10	21	36 352	5 318	6 783	2 001
1971-72	10	20	44 925	4 879	7 482	2 075
1972-73	10	19	62 276	4 577	8 701	1 829
1973-74	11	18	94 788	4 255	11 608	1 594
1974-75	10	17	126 844	4 205	13 243	1 397

Details of financial transactions by building societies during 1974-75 are given in the next table.

Building Societies: Transactions, South Australia, 1974-75

Particulars	Permanent	Starr-Bowkett	Total
Income:		\$'000	
Interest on mortgage loans Other	11 307 2 084		11 307 2 185
Total	13 391	101	13 492
Expenditure: Interest on borrowed funds Administration and taxation	10 453 2 666		10 453 2 701
Total	13 119	35	13 154

Building Societies: Transactions, South Australia, 1974-75 (continued)

Particulars	Permanent	Starr-Bowkett	Total
		\$'000	
Deposits:			
Received	17 955 16 712	_	17 955 16 712
Government housing funds (a):			
Received	368		368
Advances:			
Paid	30 065 14 209	311 414	30 376 14 623

<sup>(</sup>a) Transactions between Societies and State Treasury.

Details of assets and liabilities of these societies, given in the following table, are compiled from individual returns with a variety of balancing dates. The figures for each year represent the aggregate of returns with balancing dates in that year.

Building Societies: Assets and Liabilities, South Australia

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
Assets:			\$'000		
Advances on mortgages and shares	45 439 996 3 651 296 164	54 134 1 903 5 402 1 151 740	71 982 1 966 14 641 4 405 906	106 639 2 206 18 669 2 987 1 160	122 398 2 620 12 839 3 561 1 549
Total assets	50 545	63 331	93 900	131 662	142 968
Liabilities:					
Subscriptions	30 542 1 316 4 892	39 262 1 319 6 389	66 011 1 404 7 757	101 919 1 547 7 644	111 279 1 733 8 890
Loans due: To Government (b) To other lenders (incl.	12 903	14 606	16 546	17 221	16 861
bank overdraft) Other	683 210	1 392 363	1 857 325	2 756 575	3 427 778
Total liabilities	50 545	63 331	93 900	131 662	142 968

<sup>(</sup>a) Includes fixed deposits. (b) Loans made to permanent building societies under the Housing Agreements and the States Grants (Housing) Act 1971-1973.

#### **CO-OPERATIVE SOCIETIES**

For the purpose of collecting the statistics in this section co-operative societies have been defined as producing, manufacturing, marketing or distributing societies which substantially fulfil the following conditions:

- 1. the greater part of the business of such a society to be transacted with its own shareholders;
- 2. any distribution of surplus after payment of dividend on share capital to be amongst suppliers or customers in proportion to the business transacted with the society:
- 3. limitation of voting power to one vote per person:
- 4. dividend on share capital not to exceed 10 per cent.

All such societies must be registered under the Industrial and Provident Societies Act, 1923-1974. The Registrar of Industrial and Provident Societies must approve the rules of each society before it may be registered.

Co-operative societies may be classified under three broad headings—those serving producers, those serving consumers, and those fulfilling both functions. In the following table societies and members have been classified under these headings.

Co-operative Societies: Societies and Membership, South Australia

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
Societies:					
Producers societies	39	39	41	43	39
Consumers societies	12	12	12	14	11
Producers and consumers					
societies	12	11	11	11	11
_					
Total societies	63	62	64	68	61
Members: Producers societies Consumers societies Producers and consumers	14 380 105 887	14 618 105 317	14 157 103 938	15 253 103 592	15 624 103 395
societies	3 754	3 820	3 798	3 717	3 682
Total members	124 021	123 755	121 893	122 562	122 701

Of the thirty-nine producers societies operating in 1974-75, seven were co-operative wineries or distilleries, five represented dairy producers, and fifteen were associated with fruit and vegetable production. Six of the remaining twelve societies were associated with other rural production. Of the eleven co-operative consumers societies, six were trading as general storekeepers, the remainder offering specialised products or services. Producer-consumer societies were generally associated with the fruitgrowing industry.

Particulars of the aggregate income and expenditure of co-operative societies for the five years to 1974-75 are given in the following table.

Co-operative	Societies:	Income,	Expenditure	and	Appropriations
		South A	Lustralia		

Particulars	1970-71	1971-72	1972-73	1973-74	1974-75
Income:			\$'000		
Sales	66 228	74 021	77 842	95 480	107 159
Other	4 962	5 814	6 328	7 029	10 940
Total	71 190	79 835	84 170	102 509	118 098
Expenditure:					
Purchases	47 826	52 106	54 889	63 987	71 343
Working expenses (a) Interest on external	20 555	25 630	27 668	36 129	46 335
borrowing	970	1 148	1 231	1 560	2 322
Total	69 351	78 883	83 788	101 675	119 999
Appropriations:	······································		<del></del>		
Rebates and bonuses	2 553	2 057	2 971	2 764	2 123
Interest and dividends to					
shareholders	514	555	672	605	740
Other	1 615	1 438	1 615	1 706	3 608
Total	4 681	4 050	5 258	5 075	6 471

<sup>(</sup>a) Includes provision for depreciation and bad debts.

Details of the liabilities and assets of the societies in each category for 1974-75 are given below. The seven co-operative wineries and distilleries accounted for 54 per cent of producer society assets.

Co-operative Societies: Assets and Liabilities, South Australia, 1974-75

Particulars	Producers Societies	Consumers Societies		Total
	\$'000			
Assets (a):				
Land and buildings	10 261	3 395	2 827	16 483
Fittings, plant and machinery	12 616	393	1 514	14 523
Stock	28 792	4 018	1 838	34 648
Sundry debtors	10 549	908	2 963	14 421
Cash	1 219	379	55	1 653
Profit and loss account	1 058	13	<del></del>	1 071
Other (b)	3 780	1 451	3 476	8 708
Total	68 276	10 557	12 673	91 506

# Co-operative Societies: Assets and Liabilities, South Australia, 1974-75 (continued)

Particulars	Producers Societies	Consumers Societies	Producers and Consumers Societies	Total
T . 1 . 1	\$,000			
Liabilities: Capital	7 494 16 126	3 125 3 031	791 4 645 2 387	11 410 23 802
Bank overdraft Sundry creditors Accumulated profits	14 695 5 186 283	407 700 678	2 421	17 490 8 306 961
Reserves and reserve funds $(c)$ Other $(d)$	9 463 15 030	1 618 998	1 049 1 380	12 129 17 408
Total	68 276	10 557	12 673	91 506

- (a) Assets are shown at net value after deduction of provisions.
- (b) Includes investments and advances to members.
- (c) Excludes provision for depreciation and bad debts.
- (d) Includes amounts due to members.

#### CO-OPERATIVE CREDIT SOCIETIES

Co-operative Credit Societies are defined as 'financial' organisations, registered under the Industrial and Provident Societies Act, 1923-1974, which have more than half of their assets in the form of loans to members and/or derive more than half of their income from such loans.

Societies included in this collection, which began in 1970-71, are mainly Credit Unions or Savings and Loans Societies. The figures below are excluded from the statistics of Co-operative Societies on pages 660-2.

Details of assets and liabilities of these societies, given in the following table, are compiled from individual returns with a variety of balance dates. The figures are aggregates of returns submitted by societies for their relevant accounting periods closing on various dates during the financial years shown.

## Co-operative Credit Societies, South Australia

Particulars	1971-72	1972-73	1973-74
Societies	33 31 711 30 728 16 638	Number 37 42 323 46 077 20 246	41 52 387 57 098 25 140

## Co-operative Credit Societies, South Australia (continued)

Particulars	1971-72	1972-73	1973-74
Salastad Bassints and Baymants		\$'000	
Selected Receipts and Payments: Deposits received (b)	10 752	19 657	32 395
Deposits repaid (c)	6 588	11 333	22 611
Loans paid over	9 607	17 209	22 853
Loan repayments (c)	6 600	10 665	16 030
Budget savings deposits received	1 519	2 764	2 905
Budget savings payments made	1 359	2 546	2 846
Income:			
Interest on loans to members	932	1 573	2 520
Other	52	108	156
Total	984	1 680	2 676
Expenditure:	· · · · · · · · · · · · · · · · · · ·		
Interest on deposits	594	966	1 633
Other $(d)$	472	804	1 245
Total	1 066	1 770	2 878
Assets:			
Loans to members	11 714	19 746	29 415
Cash in hand and at bank	312	439	366
Investments	381	1 032	1 644
Other	94	166	244
Total	12 501	21 383	31 669
Liabilities:			
Share capital	341	447	519
Reserves and accumulated profits	<del>46</del>	152	<del>361</del>
Deposits	11 588	19 957	29 812
Budget savings accounts	202	423	479
Bank overdraft	173	124	338
Other	243	584	882
Total	12 501	21 383	31 669

<sup>(</sup>a) Shareholders may or may not have deposit accounts. Deposit account holders are not always shareholders. (b) Includes interest accrued of \$576 000 in 1971-72, \$962 000 in 1972-73, and \$1 656 000 in 1973-74. (c) Includes interest. (d) Includes dividends on shares, salaries and wages, administrative expenses, and provisions for taxation, doubtful debts, and long service leave.

## ESTATES OF DECEASED PERSONS

During recent years more than 80 per cent of the estates of deceased persons subject to the jurisdiction of the Supreme Court have been administered by executors following the grant of probate on wills left by the deceased. Should the executorship of a will fail for any reason, for example by the death or renunciation of a nominated executor, the Court issues 'letters of administration with the will annexed' but the more usual 'letters of administration' relate to

the estates of persons who died intestate. Tables in this section contain details of estates covered by the three types of grant during specified years. The aggregate number of these estates is considerably less than the number of deaths in South Australia in corresponding periods.

Estates generally are those located in South Australia and not necessarily estates of deceased residents of this State. The net value of an estate is the gross value less proved liabilities; these liabilities do not include Australian Government estate duty or State succession duties.

The following table shows the number and value of estates for which probate or administration was granted by the Supreme Court during the five years to 1974.

Estates of Deceased Persons, South Australia

Year	Estatas	Gross Val	ue of Estates	Not Volue	Average Net
i ear	Estates	Real	Personal	Net Value of Estates	Value per Estate
-	No.	\$'000	\$'000	\$'000	\$
			Males		
1970	. 2 995 . 2 995	16 320 18 307 20 353 20 932 23 623	40 644 46 584 44 248 46 272 45 303	51 797 60 052 59 237 62 404 64 111	18 699 18 330 19 778 20 836 21 334
			FEMALES		
1970	. 2 588 . 2 296 . 2 278	9 034 10 261 10 849 12 258 16 160	20 111 24 892 22 720 23 951 28 279	27 255 32 980 31 644 33 800 42 053	12 377 12 743 13 782 14 838 18 276
1970	4 972 5 864 5 291 5 273 5 306	25 355 28 568 31 202 33 190 39 782	Persons 60 755 71 476 66 968 70 223 73 581	79 052 93 032 90 881 96 203 106 164	15 899 15 864 17 176 18 244 20 008

The distribution of estates through various size groups and the gross value of real and personal estate respectively in each group are shown in the following table for the years 1973 and 1974.

For each year estates with an individual net value under \$2,000 accounted for approximately 20 per cent of the total number but less than 2 per cent of total net value. In 1974, estates under \$10,000 constituted approximately 51 per cent of total numbers but less than 10 per cent of total net value, while the few estates, about 8 per cent of the total, with an individual net value of \$50,000 or more accounted for approximately 47 per cent of the total net value.

Real estate formed approximately 35 per cent of the total gross value for all estates in 1974.

Estates of Deceased Persons: Size and Structure of Estates, South Australia

		1	973			19	974			
Size of Net Estate		V	lue of Esta	tes		v	Value of Estates			
	Estates	G	ross		Estates	G	Gross			
		Real	Personal	Net		Real	Personal	Net		
(\$'000)	No.	\$'000	\$,000	\$'000	No.	\$'000	\$'000	\$'000		
Under 2	1 047 670	271 282	1 609 2 159	1 011 1 981	967 643	228 201	1 651 2 093	901 1 896		
4 and under 6 6 and under 8 8 and under 10	484 362 354	612 915 1 562	2 280 1 904 1 956	2 407 2 522 3 200	475 341 291	350 689 947	2 370 2 022 1 998	2 342 2 372 2 603		
10 and under 20 20 and under 30	1 112 451	8 543 4 454	8 590 7 186	15 668 10 974	1 138 593	9 350 7 669	8 600 7 360	16 616 14 292		
30 and under 40 40 and under 50	214 159	2 415 2 483	5 289 5 079	7 324 7 100	259 150	3 646 2 452	5 882 4 597	8 946 6 685		
50 and under 100	278	5 183	14 761	19 000	296	6 137	15 013	20 197		
100 and under 200	108	3 939	11 431	14 838	121	4 987	11 869	16 302		
200 and under 400	31	2 113	6 839	8 632	22	1 548	4 575	5 978		
400 and over	3	419	1 139	1 545	10	1 578	5 550	7 034		
All estates	5 273	33 190	70 223	96 203	5 306	39 782	73 581	106 164		

The following table provides an analysis of estates on which probate or administration was granted during 1974 according to the age group of persons leaving those estates.

Estates of Deceased Persons: Age and Sex of Deceased, Value of Estates South Australia, 1974

		ľ	Males			Fer	nales		
Age of	Estatos	Va	lue of Es	tates	Estates	Va	lue of Estates		
Deceased	Deceased Estates	Gross	Net	Average Net	·	Gross	Net	Average Net	
	No.	\$'000	\$,000	\$'000	No.	\$'000	\$'000	\$'000	
Under 21	37	387	353	9.5	4	33	30	7.5	
21 to 29	66	1 086	943	14.3	12	85	77	6.4	
30 to 39	59	1 737	1 552	26.3	22	202	179	8·1	
40 to 49	154	3 266	2 875	18.7	46	920	775	16⋅8	
50 to 59	426	8 996	7 899	18.5	155	2 334	2 087	13.5	
60 to 69	738	16 933	15 788	21.4	333	7 730	7 306	21.9	
70 to 79	773	17 303	16 296	21.1	713	14 398	13 646	19-1	
80 and over	729	18 644	17 839	24.5	1 004	18 168	17 390	17.3	
Not stated	23	574	565	24.6	12	568	564	47.0	
All ages	3 005	68 926	64 111	21.3	2 301	44 438	42 053	18.3	

### REAL ESTATE MORTGAGES

The Real Property Act, 1886-1975, provides for the registration of mortgages on real estate and details of new loans and discharges are given in the following table. The average value of new loans in 1974-75 was \$15 261 compared with \$11 669 in 1973-74

			~	
Mortgages:	Real	Estate.	South	Australia

	Year		New	Loans	Discharges				
			 			No.	\$'000	No.	\$'000
1965-66			 	 		38 779	262 812	30 661	104 547
1966-67			 	 		37 937	215 926	30 689	104 808
1967-68			 	 		36 513	209 450	30 291	97 343
1968-69			 	 		35 409	209 402	30 620	117 409
1969-70			 	 		37 942	224 132	34 940	126 941
1970-71			 	 		38 920	315 793	35 995	146 011
1971-72			 	 		46 099	398 775	41 220	190 008
1972-73			 	 		56 801	514 203	52 939	241 141
1973-74			 	 		60 390	704 678	58 246	363 310
1974-75			 	 		47 204	720 366	46 434	308 546

### INSTALMENT CREDIT FOR RETAIL SALES

Instalment credit is defined as covering all schemes under which repayment is made by regular predetermined instalments, such as time payment, budget accounts and certain personal loans. Credit schemes which do not involve repayment by regular predetermined instalments, lay-bys and all credit transactions related mainly to the financing of 'producer' type goods such as plant, machinery and motor vehicles normally used for commercial purposes are excluded from the following statistics (before July 1973 the financing of 'producer' type goods was included). Also excluded are the financing of sales of land and buildings, property improvements, services such as repair work and travel facilities, and rental and leasing schemes.

Legislation controlling instalment credit schemes in South Australia is embodied in the Consumer Transactions Act, 1972-1973 and the Consumer Credit Act, 1972-1973, both effective from 1 November 1973. Since that date, it has not been possible to enter into a hire-purchase agreement in South Australia.

The Consumer Transactions Act repealed the Hire-Purchase Agreements Act, 1960-1971 and originated 'consumer contracts', 'consumer credit contracts' and 'consumer mortgages'. Generally consumer contracts and consumer credit contracts refer to the purchase by an individual of goods or services, where their price and the principal amount of credit extended does not exceed \$10 000. The Act specifies certain conditions and warranties to be implied in all consumer contracts and provides that these cannot be excluded, limited or modified by

agreement between the parties to the contract. In contrast with previous legislation, under a consumer mortgage the consumer becomes the owner of the goods when they are delivered to him and the credit provider holds a mortgage over the goods as security for the amount payable. Hence goods may still be repossessed if the consumer breaches certain conditions of the agreement. However, subject to the conditions stipulated in the Act, the consumer may return the goods and rescind the consumer mortgage at any time. The Act also ensures that written contracts meet certain prescribed printing sizes to be enforceable.

The Consumer Credit Act repealed the Money-lenders Act and established a Credit Tribunal to which, in certain circumstances, consumers may apply for relief from the terms of a contract. The Tribunal also acts as licensing authority for those persons and corporations deemed to be credit providers under the Act and controls the conditions of operation of 'revolving charge accounts'. Information to be included in a credit contract, including the credit charge, is specified in detail by the Act.

Details of instalment credit provided during the years 1970-71 to 1974-75 are given in the following tables. In each of these tables the motor vehicle group includes new and used motor cars, motor cycles, caravans, motor parts and accessories. Included in household and personal goods are furniture and furnishings, domestic refrigerators, electrical goods, musical instruments, bicycles, and other household and personal goods. For the definition of finance companies see page 668.

### Instalment Credit for Retail Sales, South Australia (a)

			Amount Fi	nanced (b)	,		Bala	
Year	Motor V		Househo Personal		То	tal	Outstar	
	Finance Companies	Other Businesses	Finance Companies	Other Businesses	Finance Companies	Other Businesses	Finance Companies	Other Businesses
				\$ 1	nillion			
1970-71 1971-72 1972-73	88	·0	32 34 37	•5	125 122 130	·5	190 188 195	3-4
1973-74 1974-75		1·1 0·9	7·5 9·6	29·3 32·1	92·3 100·0	30·4 33·0	151·6 173·8	26·0 25·9

- (a) Before 1973-74 the figures covered both South Australia and the Northern Territory and all businesses were included. From 1973-74 they cover only South Australia and relate only to those finance companies or other businesses which (individually or as a group of related finance companies or other businesses respectively) have balances outstanding on an Australia-wide basis of \$500 000 or more on all types of finance agreements.
- (b) Excludes hiring charges etc.
- (c) From 1973-74 excludes motor vehicles normally used for commercial purposes.
- (d) Includes hiring charges etc. Before 1973-74 includes balances for 'producer' type goods.

### Instalment Credit for Retail Sales, Motor Vehicles etc. South Australia(a)

		Ca	irs and Sta	ation Wago	ns	Other-
	Year	Number	Financed	Amount F	inanced (b)	Amount Financed
	_	New	Used	New	Used	(b)
	-	'000	)	\$ mil	lion	
1970-71 1971-72 1972-73		n.a. n.a. n.a.			93·3 88·0 93·0	
1973-74 1974-75		14·7 16·5	31·1 27·8	34·0 42·8	46·4 43·5	5·4 4·9

<sup>(</sup>a) Before 1973-74 the figures covered both South Australia and the Northern Territory and all businesses were included. From 1973-74 they cover only South Australia and relate only to those finance companies or other businesses which (individually or as a group of related finance companies or other businesses restrictly) have balances outstanding on an Australia-wide basis of \$500 000 or more on all types of finance agreements. From 1973-74 excludes motor vehicles normally used for commercial purposes.

### FINANCE COMPANIES

Finance companies are defined as incorporated companies which are mainly engaged in providing to the general public (businesses as well as persons in their private capacity) credit facilities of the following types: instalment credit for retail sales; personal loans; wholesale finance; factoring; other consumer and commercial loans; financial leasing of business plant and equipment; and bills of exchange. Special classes of financial institutions such as banks, insurance, investment and pastoral finance companies, and building and friendly societies are excluded, although merchant banking companies are included if they come within the scope of the collection.

From July 1971 the scope of the monthly collection (from which the following tables are compiled) was altered to exclude all finance companies whose balances outstanding on such finance agreements are less than \$500 000 on an Australia-wide basis. Before July 1971 the limit was \$100 000. From July 1972 the definition of other consumer and commercial loans was amended to exclude factoring of trade debts (now included in wholesale finance), loans to persons for alterations or additions to existing dwelling units estimated to cost less than \$10 000 (now included in personal loans) and liquidity placements (now excluded from these tables). In addition, the category other consumer and commercial loans was divided into finance for housing and other commercial loans. From July 1973 companies mainly engaged in financing the operations of related companies by directly writing agreements with the general public have been

<sup>(</sup>b) Excludes hiring charges etc.

included in the collection. Until that date, companies mainly engaged in the financial leasing of business plant and equipment and/or bill of exchange transactions with the general public were excluded, unless they were related to a finance company. Also from July 1973, statistics of credit transactions related to the financing of 'producer' type goods such as plant, machinery and motor vehicles normally used for commercial purposes were excluded from instalment credit for retail sales and included almost entirely in other commercial loans. The definitions and statistics of finance companies and instalment credit for retail sales given in this and the previous section are directly comparable from July 1973. The following table gives a summary of the transactions of Finance Companies during the last five years.

# Finance Companies: Summary of Transactions South Australia(a)

Particulars	1970-71	1971-72( <i>b</i>	) 1972-73	1973-74	1974-75
Leasing of business equipment and plant:			\$ million		
Goods leased during the period	20.5	23.6	30.7	(e) 46·0	41.7
Balances outstanding at end of period	35.7	(c) 51·9	60.8	(e) 88·8	105-6
Other transactions:					
Amount financed	368.9	452.3	(d) 379.0	(f)485.9	(g) 455·8
liquidations	392.4	478.8	(d) 414·1	(f) 501·8	581.8
Balances outstanding at end of period	354.5	388-5	(d) 388·0	(f) 466·5	502-4

- (a) Includes Northern Territory for all years except 1972-73 and 1973-74.
- (b) From 1971-72 excludes finance companies with balances outstanding of less than \$500 000.
- (c) From 1971-72 basis of valuation is 'gross receivables'.
- (d) From 1972-73 excludes liquidity placements.
- (e) From 1973-74 includes all financial leasing companies.
- (f) From 1973-74 includes companies directly financing the sales of related companies to the general public.
- (g) Excludes Northern Territory.

The value of goods leased during the period is the capital cost of new goods plus the depreciated value of goods re-leased plus the purchase price of secondhand goods newly leased during the period. Before July 1971 the basis of valuation of leasing agreements at the end of the period was the 'initial capital cost of the goods less depreciation to date'. From July 1971 provision has also been made for finance companies to report on a 'gross receivables' basis, i.e. the value of expected future receipts from existing leasing agreements including unearned income plus the agreed residual value of the goods at the end of the leasing period. Although most companies are now reporting on the 'gross receivables' basis, some data is still being reported on the 'capital cost less depreciation' basis and therefore the figures for the 'balances outstanding at end of period' from 1971-72 are partly estimated.

The amount financed, which is the actual amount of cash provided, may be classified according to the purpose of the loan. The comments below are offered to clarify the content of various items in the tables which follow:

- 1. Instalment credit for retail sales is defined in the same way as in the previous section (see page 666);
- 2. Personal loans include all loans to persons in their private capacity, other than loans classified as instalment credit or finance for housing and from 1972-73 includes loans to persons for alterations or additions to existing dwelling units estimated to cost less than \$10 000;
- 3. Wholesale finance relates mainly to the financing of motor vehicle dealers' stocks held under bailment or floor-plan schemes but includes also financing of other trading stock and from 1972-73 the factoring of trade debts:
- 4. Finance for housing includes finance for houses, flats, home units and other dwelling units (excluding hotels, hostels, etc.), loans to persons for alterations or additions to existing dwelling units estimated to cost \$10 000 or more and finance for the purchase of residential blocks of land:
- 5. Other commercial loans include loans for the purpose of developing a tract of land into residential blocks, construction other than housing and the financing of sales of 'producer' type goods.

### Finance Companies: Amount Financed South Australia(a)

Purpose of Loan	1970-71	1971-72 (b)	1972-73 (a)	1973-74 (e)	1974-75
Instalment credit for retail sales Personal loans	100·8 8·4 124·7	95·4 11·1 130·5	\$ million 91·2 (c) 20·8 (c) 134·4	(f) 92·3 24·0 174·4	100·0 24·7 228·8
Finance for housing; Purchase of existing housing Construction of housing Purchase of individual residential blocks of land Other commercial loans	} 135·1	215·3-	(c) 49·4 (c) 41·9 (c) 13·4 (c) 28·0	64·9 51·5 20·6 (f) 58·1	22·9 32·1 9·5 37·7
Total	368.9	452.3	(d) 379·0	485.9	455-8

(a) Before 1972-73, includes Northern Territory.

the general public.

rom 1973-74 the financing of 'producer' type goods was excluded from instalment credit for retail sales and included in other commercial loans. (f) From

<sup>(</sup>b) From 1971-72 excludes finance companies with balances outstanding of less than \$500 000. (c) From 1971-72 excludes mance companies with balances outstanding of less than \$500 000.
 (c) From 1972-73 the definition of other consumer and commercial loans has been amended to exclude factoring of trade debts (now included in wholesale finance), loans to persons for alterations or additions to existing dwelling units estimated to cost less than \$10 000 (now included in personal loans), and liquidity placements.
 (d) From 1972-73 excludes liquidity placements.
 (e) From 1973-74 includes companies directly financing the sales of related companies to

Although finance for housing is dissected into three components for the amount financed, a similar dissection is not available for collections and other liquidations, or balances outstanding which are detailed in the following tables.

Finance Companies: Collections and Other Liquidations, South Australia (a)

Purpose of Loan	1970-71	1971-72 (b)	1972-73 (a)	1973-74 (a) (e)	1974-75
			\$ million		
Instalment credit for retail sales Personal loans	118·4 11·0 125·3	126·3 11·1 130·4	118·5 (c) 19·2 (c) 137·0		129·1 30·5 236·3
Other consumer and commercial loans:					
Finance for housing Other commercial loans	> 137⋅8	211.0	(c) 107·6 (c) 31·8	137·9 (f) 47·6	131·9 54·1
Total	392-4	478-8	(d) 414·1	501.8	581.8

For footnotes see following table.

Finance Companies: Balances Outstanding, South Australia (a)

Purpose of Loan	1970-71	1971-72 (b)	1972-73 (a)	1973-74 (a) (e)	1974-75
Instalment credit for retail sales Personal loans Wholesale finance	159·2 16·1 20·0	159·0 18·2 23·7	\$ million 150·6 (c) 28·4 (c) 22·0	(f) 151·6 34·1 23·0	183·4 41·0 31·1
Other consumer and commercial loans:  Finance for housing Other commercial loans	· 159·3	187·6{	(c)147·6 (c) 39·4	193·5 (f) 64·3	175·6 71·4
Total	354.5	388-5	(d) 388·0	466.5	502.4

<sup>(</sup>a) Includes Northern Territory for all years except 1972-73 and 1973-74.

<sup>(</sup>b) From 1971-72 excludes finance companies with balances outstanding of less than \$500 000.

<sup>(</sup>c) From 1972-73 the definition of other consumer and commercial loans has been amended to exclude factoring of trade debts (now included in wholesale finance), loans to persons for alterations or additions to existing dwelling units estimated to cost less than \$10 000 (now included in personal loans), and liquidity placements.

<sup>(</sup>d) From 1972-73 excludes liquidity placements.

<sup>(</sup>e) From 1973-74 includes companies directly financing the sales of related companies to the general public.

<sup>(</sup>f) From 1973-74 the financing of 'producer' type goods was excluded from instalment credit for retail sales and included in other commercial loans.

### FINANCIAL CORPORATIONS ACT

The Financial Corporations Act 1974 which was assented to on 7 August 1974, enables the Reserve Bank to examine and regulate the business activities of non-bank financial intermediaries (finance companies, building societies, credit unions, etc.) and large retailers which finance their sales by instalment credit schemes.

In order to perform its monitoring and control function, the Reserve Bank is empowered by the Act to collect monthly information from each of the larger financial corporations (assets in excess of \$5 million) and from the larger retailers (balances outstanding in excess of \$5 million on instalment credit for retail sales agreements). Other financial corporations with total assets in excess of \$1 million are also required to submit information at less frequent intervals.

Some types of financial institutions such as banks and insurance companies are specifically excluded from the provisions of the Act.

PART 13

### **REGIONAL STUDIES**

### SOUTH EAST

### Size and Location

The South East Statistical Division extends from Coonalpyn to Port MacDonnell and is bounded to the west by the Southern Ocean and to the east by the Victorian border. It covers a total area of 2 543 470 hectares (approximately 2.5 per cent of the area of the State).

The South East comprises the District Councils of Beachport, Coonalpyn Downs, Lacepede, Lucindale, Millicent, Mount Gambier, Naracoorte, Penola, Port MacDonnell, Robe and Tatiara, the Municipality of Naracoorte, and the City of Mount Gambier.

### Topography and Soils

In recent geological time a vast shallow sea covered most of the South East of South Australia and part of Victoria. Over time, this sea retreated irregularly to the present coastline and this has had a marked influence on the topography and soils of the region. The sea has left behind a series of low ridges, being the coastal dunes of former shores. Originally composed of material similar to that found on modern beaches, these ridges are now consolidated into limestone, although they are still covered by sandy matter.

Lying parallel to the present coast these low ridges (30 to 40 metres high) have impeded effective drainage to the sea. Consequently the inter-dune areas were swampy and contained lagoons or lakes of various sizes which resulted

in a black clay top-soil covering large areas of these low-lying flats. Red loams known as Terra Rosa soils occur on the western junction of these black flats and sandy ridges.

Volcanic activity has determined the topography and soils in the south-eastern corner of the Division while the more northern areas have a land formation resulting from strong wind erosion. This erosion has re-sorted materials from old sea beds, piling up sand into dunes, and these are a common feature of the area popularly known as the Ninety Mile Desert.

Good supplies of underground water can be obtained through most parts of the region. In most cases the quantity and quality is suitable for irrigation and several areas of intensive development where crops and pastures are irrigated can be found throughout the region. The exceptions are the north and western districts where both the frequency and quality of water is more irregular and difficult to obtain.

### Meteorology

The South East of South Australia experiences warm to hot, predominantly dry summers and cool wet winters. However, coastal stations south of Beachport frequently report showers or early morning drizzle even during summer.

During the warmer months of November to March anti-cyclones are usually centred in the Great Australian Bight and extend ridges of high pressure through Bass Strait to the Tasman Sea. Low pressure systems and their associated cold fronts occasionally bring showers and drizzle to most of the South East of the State. During the winter months, however, the subtropical ridge shifts northwards and the region is influenced to a greater extent by eastward-moving depressions and their associated cold fronts.

The rainfall is greatest over the elevated terrain in the vicinity of Mount Burr, Mount Gambier and Kalangadoo—highest annual average in the area is 829 mm at Lake Leake. However, the rainfall decreases fairly uniformly to less than 450 mm north-east of Keith and Bordertown.

For agricultural purposes rainfall during January and February is generally of little value, but March rainfall is usually effective in the area encompassed by Mount Gambier, Mount Burr and Kalangadoo. By the end of April the rainfall is effective over the whole district and remains so until October. The growing season closes over the northern parts of the district during November, but on the average extends well into December south of the line joining Lake St Clair, near the coast, and Coonawarra. Thus, over the southern sector of this district the growing season extends from early April into December, approximately nine months, while over the remainder it is of about eight months duration.

The mean temperatures (the average of the maxima and minima) have special significance to agriculture and horticulture. Although the area is one of the coldest in the State, the mean monthly temperature never falls below 7°C so that nowhere is growth completely inhibited.

# SOUTH EAST STATISTICAL DIVISION AND SUBDIVISIONS



Mean January maxima range from about 21°C at Cape Northumberland to about 29°C at Bordertown while mean minima for that month range from about 10°C at Coonawarra to approximately 14°C at Bordertown.

In July mean maxima generally lie within the range from 12.5°C to 14.5°C at all stations. Mean July minima, however, range from about 4°C at Coonawarra to about 8°C at Robe.

The South East is prone to frost in those localities where air drainage is poor and where the sea has no warming influence. Severe frosts are usually first experienced in June at stations more than about 30 kilometres from the coast and as early as May in the extreme north-east beyond the Naracoorte Range. The last severe frost generally occurs in August away from the coast, is usually delayed until September further inland and is experienced as late as October in the extreme north-east.

### History

In 1800 Lieutenant James Grant and the 13 crew members of HMS Lady Nelson first saw the South East coast. Grant discovered and named Mount Schanck, Gambier's Mountain (which later became Mount Gambier), Cape Northumberland and Cape Banks. Grant and his men did not land on the coast. Matthew Flinders chartered the coast two years later, but it appears that he, too, did not land.

During the 1830s the Henty family established a settlement in the Portland district of Victoria. In 1839 Charles Bonney pioneered an overland stock route from Portland to Adelaide, passing 50 kilometres north of the present site of Mount Gambier. Later the same year Stephen Henty discovered the Mount Gambier lakes and soon after, the Hentys established cattle stations in the area. Stocking of this newly discovered country took place in the next two years. As a result of not securing a valid lease of the land on which they squatted, the Hentys were dispossessed of this territory after four years. During the 1840s some of the larger sheep and cattle holdings were established in the area.

Mount Gambier as a town was founded by Hastings Cunningham in 1854. Cunningham called the town Gambier, then Gambierton but it soon became known generally as Mount Gambier.

The first surveyed town in the South East was Grey Town at the south end of Rivoli Bay, which was laid out in 1846 and later known as South End. Robe was surveyed later in the same year and soon became the main port for the export of wool and other produce of the area. During the Victorian gold rushes of the 1850s many Chinese immigrants landed at Robe and travelled overland to the gold fields to avoid paying the poll tax imposed by the Victorian Government.

Naracoorte was surveyed by the government in 1859. This was immediately north-west of the private town of Kincraig which had been laid out by William McIntosh in 1847. Port MacDonnell was surveyed and officially declared a port in 1860. Millicent and Beachport, both government towns, were surveyed in 1870 and 1878 respectively.

In the latter half of the nineteenth century most of the remaining usable land in the South East Division was taken up by pastoral or agricultural interests. By 1860 there were about 800 000 sheep in the Division and this had risen to 1.6 million by 1877 but, for various reasons (which are discussed later), the numbers had fallen to 1.4 million by 1900.

During this period fruit and vegetable growing was introduced into the area, and by 1900 there were about 250 hectares of grape vines. Many towns such as Penola, Mundalla, Padthaway and Coonawarra grew up from these developments.

Initially some of the land was unsuitable for rural production because of the tendency for water to accumulate rather than drain away. However much of this land was able to be reclaimed by the implementation of drainage schemes. The first major drainage scheme, in the Millicent area, was commenced in 1863 and completed in 1885, resulting in the reclamation of 40 000 hectares.

Although stocked in the 1850s the area around Tintinara was found unsuitable for grazing and was of limited use for crops. The lack of the trace elements, copper and cobalt caused the sheep to deteriorate in health very rapidly and it was not until the 1940s that government sponsored research was able to overcome this problem. The town of Tintinara, like Keith and Bordertown, originated as a stopping place nominated by Inspector Tolmer for the gold escort from the Mount Alexander goldfields, in Victoria, to Adelaide. The sites of both Keith and Bordertown were surveyed in 1852 on the recommendation of Tolmer.

The construction of a railway network during the 1880s and the opening of the intercolonial railway to Victoria in 1887 was of great benefit to the South East, especially for the marketing of the produce of the area. In 1883 the border town of Wolseley was surveyed, following the completion of the line from Custon to Bordertown. Several other towns grew up beside the railway line as more settlers came into the district.

Experimental planting of *Pinus radiata* commenced at Mount Gambier in 1879, a sawmill was established at Moorak in 1904 and regular plantings began at Mount Burr and Penola Forest Reserves in 1907. Government and private planting and harvesting of radiata pine has expanded rapidly since 1900. Other industries, including paper and paperboard manufacture have grown up as a result of the extensive pine forests in the area. The towns of Mount Burr and Nangwarry were built by the Woods and Forests Department in the 1930s.

Other industries that have expanded since 1900 are the manufacture of cheese and butter, the wine industry, the extraction of limestone and, recently, the production of carbon dioxide.

In 1949 the Australian Mutual Provident Society undertook a scheme to develop the area previously known as the Ninety Mile Desert. Research had shown that the retarded nature of the country was mainly attributable to certain soil deficiencies and this was overcome by the addition of chemicals, mainly copper sulphate and zinc sulphate. In all 170 000 hectares were developed under this scheme.

The population of the South East Statistical Division was approximately 6 000 in 1860 and had risen to 19 000 by 1900. At 30 June 1975 the population of the Division was 58 300.

### **Population**

The South East Statistical Division, at 30 June 1971, had a population of 57 981. This represents less than five per cent of the total population of South Australia. The following table presents the urban and rural components of population for both the South East Statistical Division and the total State. It will be noted that the urban component of the South East amounts to only 58·1 per cent compared to 84·6 per cent for the State.

## Population: Urban and Rural Components, South East Statistical Division and South Australia. Census 1971

Particulars		h East l Division	South Australia		
	Persons	Per Cent	Persons	Per Cent	
Urban	33 680 24 301	58·1 41·9	992 669 179 148 1 890	84·6 15·2 0·2	
Total	57 981	100.0	1 173 707	100-0	

Population growth for the South East Statistical Division since the 1939-45 War has closely followed population growth for the State. For the period 1947 to 1971, population growth in the South East was 83.7 per cent while for the State it was 81.7 per cent. The following table shows the Census population figures since 1947 for the South East Statistical Division and the total State.

### Population, South East Statistical Division and South Australia

Area		C	ensus 30 Ju	ne	
 Alta	1947	1954	1961	1966	1971
	(a) 31 572 646 073		53 876 969 340	57 567 1 <b>0</b> 91 875	57 981 1 173 707

<sup>(</sup>a) 1947 and 1954 figures for the South East exclude the area now known as Coonalpyn Downs District Council.

The next table shows percentage birthplace figures for the population of the South East and the State. This table shows that, although the growth in the proportion of overseas-born persons is quite substantial for the South East, it is less than half the growth in the overseas-born population of the State. Hence, overseas migration has been a more important component of population growth for the State than for the South East.



South Australian Government Tourist Bureau An aerial view of Browne and Valley Lakes showing Mt. Gambier Hospital in the left centreground.

Lake Butler, Robe.

South Australian Government Tourist Bureau





South Australian Government Tourist Bureau

View of State Timber Mill and pine forest, Penola.

Civic and Arts Centre, Millicent, opened in April 1970 during centenary celebrations held in the town.

South Australian Government Tourist Bureau



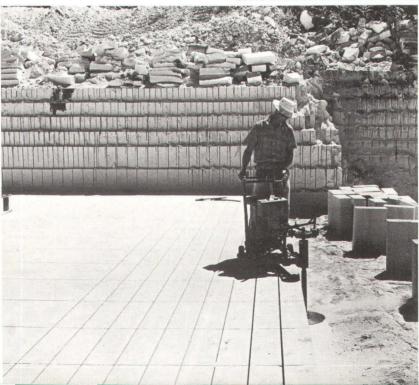


South Australian Government Tourist Bureau

APCEL Mill, Millicent, which utilises logs from the extensive pine plantations in the area, produces a range of tissue and towelling base papers, about half of which is converted on site to articles of facial and toilet tissue and towel rolls.

Working on the coralline limestone quarry at Mt. Gambier using a method of cutting the stone into ashlar size which is unique to the area.

South Australian Government Tourist Bureau





South Australian Government Tourist Bureau Vineyards at Coonawarra Estate Winery, Coonawarra.

Un-loading crayfish at Robe.

Fisheries Branch of Department of Agriculture and Fisheries



# Percentage Birthplace of Population, South East Statistical Division and South Australia

Country of Birth	Census 30 June						
Country of Birtin	1947 (a)	1954 (a)	1961	1966	1971		
		SOUTH EAST	STATISTICA	L DIVISION			
Australia	96.9	90.9	88.0	88.2	89.1		
United Kingdom	2.4	3.3	4.6	5.3	5∙0		
Europe	0.4	5.4	6.9	5.9	5.3		
Other	0.3	0.4	0.5	0.6	0.6		
		SOU'	TH AUSTRA	LIA .			
Australia	93.3	86.1	80.8	77.5	76.2		
United Kingdom	5.1	6.3	8.1	11.2	12.6		
Europe	1.0	6.7	10.0	10.1	9.6		
Other	0.6	0.9	1.1	1.2	1.6		

<sup>(</sup>a) 1947 and 1954 figures for the South East exclude the area now known as Coonalpyn Downs District Council.

The next table shows the percentage age distribution of the population of the South East and the State. The table indicates that the South East has a slightly younger age distribution than the total State, with 63.9 per cent of the population under 35 years in the South East and 59.2 per cent in that age group in the State.

Age Distribution of Total Population: South East Statistical Division and South Australia, Census 1971

Age (Years)		h East l Division	South Australia	
	Persons	Per Cent	Persons	Per Cent
0-14	19 226	33.2	339 850	29.0
5-24	10 043	17.3	205 288	17.5
5-34	7 744	13.4	149 218	12.7
35-44	6 772	11.7	139 155	11.8
5-54	6 311	10.8	137 166	11.7
5-64	4 468	7.7	103 430	8.8
55 and over	3 417	5.9	99 600	8.5
Total	57 981	100.0	1 173 707	100-0

### Births and Deaths

When compared with the State as a whole, the South East has had a substantially higher birth rate and a slightly lower death rate in recent years. This is partly attributable to the younger age distribution of the population, but it is likely that there are other relevant factors.

Live B	irths:	Number	Registered	and	Rate,	South	East	Statistical	Division
			and Sout	h Au	ıstralia	ì			

Year		n East I Division	South A	Australia
-	Number	Rate (a)	Number	Rate (a)
1970	1 419	24.49	22 617	19.52
1971	1 394	24.04	22 966	19.55
1972	1 304	22.54	21 844	18.37
1973	1 138	19.76	20 407	16.97
1974	1 258	21.69	20 181	16.52

<sup>(</sup>a) Number of births per 1 000 of mean population.

## Deaths: Number Registered and Rate, South East Statistical Division and South Australia

Year							n East I Division	South A	ustralia	
					 		 Number	Rate (a)	Number	Rate (a)
1970					 	•	 425	7-33	10 138	8.75
1971					 		 416	7:17	9 686	8.25
1972					 		 411	7·10	9 764	8.21
1973							404	7.01	9 835	8.18
1974							424	7:31	10 236	8.40

<sup>(</sup>a) Number of deaths per 1 000 of mean population.

#### Education

### Government Schools

At 1 January 1976 there were fifty-one government schools in the South East Statistical Division. This number included six high schools, thirty-two primary schools, two junior primary schools, six area schools, three rural schools, one special school and one speech and hearing centre. Enrolment at 30 July 1975 were secondary students, 4 775; primary 8 724; special school 33; and speech and hearing centre five. Mount Gambier High School with 1 088 students had the greatest enrolment and Keilira Rural School with 17 students had the lowest enrolment (apart from the Speech and Hearing Centre at Mount Gambier).

The office of the Regional Director of Education for the South-Eastern Educational Region was established at Mount Gambier in 1969. All of the government schools in the South East Statistical Division come under the Regional Director's jurisdiction except for the Coonalpyn Primary School and the Tintinara Area School which are included in the Lower Murray Educational Region.

As well as being the administrative centre for the Region, the regional office has lecture rooms, a library, an educational technology centre and a film library. Supporting professional staff include a regional guidance officer, concerned with

psychological guidance to parents, students and teachers; a physical education officer; an educational technologist; and a librarian. Specialist teachers are provided to advise on a number of primary and secondary subjects.

### Non-government Schools

In the South East Statistical Division there are four Catholic primary schools and two Seventh Day Adventist primary schools. There is also a Catholic co-educational secondary school located at Mount Gambier. In all there were 380 secondary and 814 primary students enrolled in non-government schools in the Division in 1975.

### Pre-school Education

In the South East Statistical Division, pre-school education is provided by Education Department pre-schools, kindergartens registered with the Kindergarten Union of South Australia, independent kindergartens and some child care centres.

At 1 August 1975 there were two pre-schools with a total enrolment of 77 and nine Kindergarten Union registered kindergartens with enrolments totalling 701. In addition there were ten independent kindergartens and child care centres attended by 346 children, some of whom received pre-school education.

#### Other Education

The Department of Further Education maintains a College of Further Education at Mount Gambier and a Further Education Centre at Naracoorte. Both institutions conduct vocational, academic and general interest courses.

### Health Facilities

In the South East Statistical Division, public hospitals are located at Bordertown (55 beds), Kingston (25), Millicent (53), Mount Gambier (211), Naracoorte (95), and Penola (55), and there is a private hospital at Keith (52 beds).

There are ambulance services at Kingston, Lucindale, Millicent, Mount Gambier, Naracoorte, Penola, Bordertown, Coonalpyn and Keith. A regional Red Cross blood transfusion centre and a district nursing branch are also located at Mount Gambier.

Child health centres at Beachport, Bordertown, Coonalpyn, Kalangadoo, Keith, Kingston, Lucindale, Millicent, Mount Burr, Mount Gambier (3), Nangwarry, Penola, Port MacDonnell, Robe, Tarpeena, Tintinara and Wolseley serve the populations of those areas.

### **Employment**

The following table shows that 33.9 per cent of employed males in the South East are employed in the agriculture, forestry and fishing industries, as compared with 10 per cent for South Australia. This may seem a high proportion but in fact over 40 per cent of the population live in non-urban areas.

Consequently a higher proportion of self-employed persons and employers would be expected in this area. The next table shows that this is the case, with only 70·8 per cent of the labour force in the South East being employees compared with 84·6 per cent for the State.

Industry of Employed Persons: South East Statistical Division and South Australia, Census 1971

To decades:	South Statistical	East Division		outh stralia
Industry —	No.	Per Cent	No.	Per Cent
		N	1ales	
Agriculture, forestry, fishing, etc	. 5 794	33.9	32 632	10.0
Mining		0.4	3 428	1.1
Manufacturing	. 3 371	19.7	93 062	28.6
Electricity, gas and water		1.5	8 247	2.5
Construction	. 1 601	9.4	33 458	10.3
Wholesale and retail trade		15.3	55 591	17.1
Transport and storage		4.6	20 209	6.2
Communication		1.5	6 842	2.1
Finance, business services, etc		2.9	15 939	4.9
Public administration, defence		1.7	13 479	4.1
Community services		3.6	24 090	7.4
Entertainment, recreation		2.0	8 468	2.6
Other and not stated		3.5	10 037	3.1
Total employed population .	. 17 088	100.0	325 482	100.0
		F	emales	
Agriculture, forestry, fishing, etc	. 1172	18.4	8 273	5.4
$Mining  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $		0.1	340	0.2
Manufacturing		10.3	23 551	15.5
Electricity, gas and water		0.2	510	0.3
Construction		1.2	1 791	1.2
Wholesale and retail trade		24.5	38 655	25.4
Fransport and storage		1.6	2 831	1.8
Communication		1.9	2 195	1.4
Finance, business services, etc			12 198	8.0
Public administration, defence			5 714	3.8
Community services			36 082	23.7
Entertainment, recreation			14 761	9.7
Other and not stated	. 270		5 185	3.4
Total employed population .	. 6 379	100.0	152 086	100.0

# Occupational Status of Labour Force: South East Statistical Division and South Australia, Census 1971

Occupational Status		n East l Division	South Australia	
	Persons	Per Cent	Persons	Per Cent
Employer	2 153	9.0	25 300	5.2
Self-employed	4 047	17.0	38 015	7.8
Employees	16 893	70∙8	411 004	84·6
Unpaid helper	374	1.6	3 249	0.7
Unemployed	390	1.6	8 355	1.7
Total labour force	23 857	100.0	485 923	100-0

The next table showing level of qualification obtained, indicates that in this area there is a larger than average proportion of non-qualified persons. A factor that may account for this is that the area is dominated by the agriculture, forestry and fishing industries and this particular industry group is usually characterised by a low proportion of qualified people.

Population Aged 15 and Over: Level of Qualification Obtained, South East Statistical Division and South Australia, Census 1971

Qualification		n East l Division	South Australia		
	Persons	Per Cent	Persons	Per Cent	
Trade	2 517	6.5	84 283	10·1	
Technician	1 219	3.2	26 770	3.2	
Non-degree Tertiary	1 047	2.7	25 090	3.0	
Bachelor Degree	339	0.8	12 404	1.5	
Higher Degree	23	0.1	1 779	0.2	
Not classified by level	419	1.1	12 505	1.5	
Studying for qualification	830	2.1	34 93 <b>0</b>	4.2	
No qualifications	32 361	83.5	636 096	76.3	
Total	38 755	100.0	833 857	100.0	

### Water Supply

Water for domestic and industrial use in the South East is obtained from various sources. These include the River Murray, the Blue Lake, underground water from bores and springs and domestic rainwater tanks.

A 143 kilometre pipeline between Tailem Bend and Keith, which was completed in 1969, forms the backbone of a scheme involving 800 kilometres of branch mains to supply River Murray water to towns and farmlands in the Upper South East.

In the Kingston-Lucindale-Beachport area, artesian water is obtained from bores sunk into water bearing sands overlaid by lignitic impervious clay which is more than 15 metres thick. Water flowing at the rate of up to 270 000 litres an hour is obtainable from these sands.

Tertiary bryozoal limestone (porous and cavernous) known as the Gambier Limestone is the aquifer most commonly used for domestic and irrigation supplies in the South East. The groundwater occurs at or close to the surface at various places and is recharged by local rainfall. In the Penola district, large pools form during the winter months and some of this water finds its way to the aquifer through cracks and caverns in limestone overlying the Gambier Limestone. Groundwater is extensively used by industries such as the pulp and paper mills at Snuggery and the sawmills at Mount Gambier, Nangwarry and Mount Burr.

Groundwater flows rapidly in the porous limestones and issues immense volumes near the south coast. In the area around Ewen Ponds there are several springs from which water is carried to the sea by Eight Mile Creek. Several major springs occur along a sharp structured fault in the country between

Tartwaup, five miles north-west of Mount Gambier, and a point about midway between Millicent and Mount Burr. The most important of these are the Snuggery Springs which flow at a rate of up to 18 megalitres in twenty-four hours. Strong springs also occur near Beachport.

Water supply for the City of Mount Gambier comes from the Blue Lake. The Lake is more than 80 metres deep, has a surface area of 70 hectares and is believed to have a capacity of more than 35 000 megalitres. Most of the towns in the South East have reticulated water supplies, but some depend on rainwater tanks and shallow wells for their supply.

In June 1973 a small regional laboratory of the Water and Water Pollution Control Laboratories at Bolivar was established at Mount Gambier. This laboratory is staffed by a qualified chemist who carries out water analyses.

The Engineering and Water Supply Department is conducting a number of long-term water monitoring programs to determine the effect of land use and existing waste disposal practices on groundwater quality. Other work in the area is concerned with the implementation of measures aimed at reducing the level of pollution of groundwaters in the South East.

The South East Water Resources Investigation Committee has been set up to assess the waters of the South East and to plan their orderly development, both on a regional and a local scale. On a regional scale the Committee is working towards an assessment of the region's total usable water resources in terms of surface water and groundwater, and a regional water balance. On a local scale the Committee has completed investigations into the over-exploitation of the water resources of the Padthaway Basin and has published its recommendations which include a reduction in water usage from the Basin. It is currently engaged in investigations into water quantity and quality problems in the Mount Gambier, Millicent-Snuggery, Naracoorte and Bordertown areas. Ultimately the Committee is expected to produce regional water resource development and water quality control plans.

### Sewerage

In the South East sewage is disposed of by full scale sewerage systems installed by the Engineering and Water Supply Department; by common effluent drains and treatment works installed under the supervision of the Department of Public Health; and by septic tanks approved by the Central Board of Health.

Common effluent drainage differs from full scale sewerage in that it is designed to dispose only of liquid effluent from septic tanks. Because no solids are carried, pipes can be laid at lesser gradients than are required in full scale sewerage systems.

Full scale sewerage schemes are located at Millicent, Mount Gambier, Naracoorte, Mount Burr and Nangwarry, and there is a common effluent scheme at Bordertown.

### Electricity and Gas Supply

Electricity supplies for the South East are drawn from two sources: the Electricity Trust of South Australia's transmission lines of 132 000 volts from Adelaide to Mount Gambier and the steam power stations at Mount Gambier and Nangwarry.

The Mount Gambier Power Station boilers burn wood waste from local government and privately-owned mills to produce steam for generating electricity and for the drying kilns of the nearby Woods and Forests Department sawmill. The consumption of wood waste has decreased over recent years and its future as a fuel depends on its alternative uses, particularly in the pulp industry.

A program of extending the Trust's supply system to all towns and rural areas in the South East is underway and reticulation of the whole area is expected to be completed in 1976.

Liquefied petroleum gas is distributed by reticulation in Mount Gambier by the Mount Gambier Gas Company Ltd. Elsewhere in the South East, bottled gas is available.

### Housing

Since the 1939-45 War, the number of occupied private dwellings in the South East has grown by approximately 107 per cent. Growth in the State was nearly 106 per cent over the same period. The following table gives the actual number of occupied private dwellings at each Census since 1947 for both the South East and the State.

### Occupied Private Dwellings, South East Statistical Division and South Australia

Awaa		C	Census 30 Ju	ne	
Area	1947	1954	1961	1966	1971
South East Statistical Division Total State	(a) 7 919 166 118	(a) 10 617 212 095	13 334 259 344	14 439 299 629	15 809 342 067

<sup>(</sup>a) 1947 and 1954 figures exclude area now known as Coonalpyn Downs District Council,

# Population by Class of Dwelling: South East Statistical Division and South Australia, Census 1971

Dwelling		h East l Division	South Australia		
	Persons	Per Cent	Persons	Per Cent	
House	54 960 770 2 251	94·8 1·3 3·9	1 082 572 34 262 56 873	92·2 2·9 4·9	
Total	57 981	100-0	1 173 707	100.0	

The above table shows the population by class of dwelling for the South East and the State. In both cases it can be seen that well over 90 per cent

of the population live in houses. However, as may be expected by reason of the large rural component of the population, the proportion living in flats in the South East was less than half of that for the State.

A comparison of figures for material of outer walls of dwellings show that stone has been the most important material for dwelling construction in the South East. Nearly 62.9 per cent of total private dwellings in the South East had stone as the material of the outer walls, with only 6.7 per cent having brick. For the total State, only 16.6 per cent of dwellings have stone as material of outer walls while 61.2 per cent of dwellings are brick.

Occupied Private Dwellings: Material of Outer Walls, South East Statistical Division and South Australia, Census 1971

Material of Outer Walls		h East 1 Division	South Australia		
	Number	Per Cent	Number	Per Cent	
Brick	1 055	6.7	209 231	61.2	
Brick-veneer	208	1.3	19 558	5.7	
Stone	9 936	62.9	56 679	16.6	
Concrete	105	0.7	10 154	3.0	
Γimber	1 552	9.8	13 833	4.0	
Metal	504	3.2	7 785	2.3	
Fibro-cement	2 377	15.0	23 128	6.7	
Other	72	0.4	1 696	0.5	
Total occupied private dwellings	15 809	100.0	342 064	100-0	

The following table shows the sewerage facilities for dwellings. While flush toilet to public sewerage facilities exist for  $71\cdot2$  per cent of total private dwellings in the State, in the South East only  $36\cdot6$  per cent have this facility. Because of the lower urban population component, a smaller proportion with this facility than for the total State would be expected.

Sewerage Facilities of Occupied Private Dwellings: South East Statistical Division and South Australia, Census 1971

Facility		n East I Division	South Australia		
	Number	Per Cent	Number	Per Cent	
Flush toilet to public sewer Flush toilet, other Sanitary pan collection Other and not stated	5 790 8 752 508 759	36·6 55·4 3·2 4·8	243 501 85 438 2 449 10 676	71·2 25·0 0·7 3·1	
Total	15 809	100.0	342 064	100.0	

# Occupied Private Dwellings: Facilities, South East Statistical Division and South Australia, Census 1971

Facility	South Statistical	East Division	South A	ustralia
	Private Dwellings	Per Cent	Private Dwellings	Per Cent
Gas only Electricity only Gas and electricity Neither gas nor electricity Not stated	39 10 125 5 525 46 74	0·2 64·0 35·0 0·3 0·5	570 168 070 170 854 913 1 657	0·2 49·1 50·0 0·2 0·5
Total	15 809	100.0	342 064	100-0

The above table compares gas and electricity facilities available in both areas. Because of the significant proportion of rural dwellings in the South East, fewer dwellings would be expected to have both gas and electricity facilities than in the total State.

The final table presented in this section classifies the number of vehicles by private dwellings. It is significant to note that only 8.7 per cent of private dwellings in the South East have no vehicles. It can be seen that there is a higher percentage of dwellings having two or more cars in the South East than for the State.

# Occupied Private Dwellings: Number of Vehicles, South East Statistical Division and South Australia, Census 1971

Number of Vehicles (a)	South Statistical	East Division	South Australia		
_	Private Dwellings	Per Cent	Private Dwellings	Per Cent	
0	1 368 7 010 4 788 2 454 189	8·7 44·3 30·3 15·5 1·2	56 964 173 834 78 907 27 338 5 021	16·7 50·8 23·1 8·0 1·4	
Total	15 809	100.0	342 064	100.0	

<sup>(</sup>a) Motor vehicles owned or driven by members of the household and garaged or parked at or near the dwelling on Census night. (Excludes motor cycles, scooters and tractors, includes company vehicles kept at home.)

### Agriculture

The first recorded settlement in the South East took place about 1840. On the fertile, well-drained volcanic soils around Mount Gambier, agriculture was practised almost from the beginning of settlement, but in the rest of the district the land was used for pastoral purposes and the holdings were generally large. A limited amount of cropping began near Bordertown in the 1850s.

Native grasses were the basic pasture and by 1867 these open grasslands carried 1·2 million sheep and 35 000 cattle. Sheep numbers reached a peak of 1·6 million in 1877. However by 1900, rabbits and over-grazing had reduced the natural pasture, and the burning of scrub and heath to provide stock feed was freely practised. These activities, together with low prices, reduced stock numbers markedly and sheep numbers had fallen to 1·3 million by 1910. Sheep numbers reached a low of 1·1 million in 1925, but after that year sheep numbers showed an upward trend which was assisted by subterranean clover seeding and pasture top-dressing with superphosphate. The use of superphosphate began about 1900 and subterranean clover was discovered at Kybybolite in 1918. By 1940 sheep numbers were in excess of two million and there were 75 000 cattle in the Division.

Most of the pasture improvement was restricted to the 'red gum' country along the eastern edge of the region which consisted of better drained loamy soils supporting tall eucalypts in their natural state. The rate of development was dependent on supplies of pasture seed. From 1930 new techniques were introduced to harvest pasture and this later became an important industry in the area.

Together with a relatively high rainfall, large volumes of surface water entered the region each year from the Victorian highlands through a series of creeks. Natural drainage to the sea was very limited and this resulted in the annual flooding of thousands of hectares of flat and potentially productive land. In an attempt to utilise this lightly timbered country, a system of State and private drains was developed. The first drains were cut near Millicent in 1863 but most of the drainage works were undertaken after 1900.

Dairying, forestry and viticulture which had their beginnings late in the nineteenth century expanded rapidly in the period from 1920.

Although expansion in the rural industry was somewhat curtailed during the depression years and then the 1939-45 War, the improvement in agricultural pastures, fertiliser knowledge and new machinery allowed for an even faster rate of growth after the War.

### Number and Area of Holdings, Artificial Fertilisers Used for Crops, South East(a)

Year			NT			Artificial Fertilisers Used for Crops			
		Number of Holdings (b)	Area of Holdings	Area Under Crop (c)	Area Fertilised	Fertiliser Used	Fertiliser Used per Hectare		
		-				Hectares		Tonnes	kg
914-15				 n.a.	2 046 178	58 901	42 543	3 991	93.81
924-25				 n.a.	1 918 316	39 636	28 693	3 562	124-14
934-35				 3 463	2 362 891	39 862	32 389	4 180	129.0
944-45				2266	2 228 947	43 377	31 452	3 570	113.51
954-55				4047	2 197 086	67 086	56 284	8 115	144-18
964-65				4.005	2 197 101	117 228	86 202	12 869	149-29
974-75	• • •			 4 245	2 090 493	78 070	58 580	10 357	176.80

<sup>(</sup>a) Counties Buckingham, Cardwell, Grey, MacDonnell and Robe.

<sup>(</sup>b) All holdings, including those not growing crops.

<sup>(</sup>c) Excludes pastures harvested for hay or seed, or cut for green feed or silage.

The subdivision of larger properties was encouraged by the government acquiring and developing land for settlement by ex-servicemen. Later the AMP Society acquired large holdings in the northern districts and began developing land for settlement. These agencies, together with private developers were responsible for the opening up of more than 40 000 hectares annually for more than a decade from 1948.

Major drainage schemes released more land for agricultural purposes; the availability of larger and more powerful machinery together with finance facilitated production; and high prices and good seasons encouraged expansion. Other advances included the application of trace elements (copper and zinc) to sandy soils and the supplement to stock diets of copper and cobalt to overcome a nutritional deficiency which caused wasting and loss of wool quality.

The value of perennial pasture species gained greater recognition as supplies of strawberry clover and phalaris seed became available; these pastures were adapted to the heavy black soils. At the same time the drainage system in the more southern districts was extended and enlarged, and was a major factor in enabling expansion of improved pasture through the middle and southern districts of the region. Lucerne, another perennial legume, was equally important to the development of the sandy soils in the north following the discovery of particular fertiliser needs and sowing techniques.

### Livestock

Drought, shortage of labour and a rapidly expanding rabbit population brought a fall in livestock numbers in the mid-1940s with the number of sheep declining from 2 million to 1.8 million in the period from 1940 to 1945. However conditions improved from this time, including more effective poisoning techniques and the appearance of the rabbit disease, myxomatosis, and by 1960 there were more than 3.5 million sheep and 180 000 cattle in the Division.

T imageasle	Mambana	and	Chaorina	Courth	Foot(a)
Livestock	Numbers	ana	onearing.	South	Last(a)

			Numbers at 3	Year Ended 31 March			
	Year	Year Cattle		Pigs	Sheep	Sheep	Wool
		For Meat Production	For Milk Production	1 163	ысор	Lambs Shorn	Clip
				Number			kg
1915		21 432	11 983	7 975	1 098 011	n.a.	n.a.
925		21 238	18 238	8 844	1 139 933	1 100 801	3 811 965
935		32 192	23 784	4 577	1 513 112	1 510 455	5 299 600
945		45 993	38 065	5 856	1 817 003	2 032 795	7 299 353
955		79 626	66 333	7 511	2 917 946	3 084 998	13 651 629
965		186 417	65 208	17 974	4 944 710	5 226 249	24 225 586
975		795 508	51 251	24 398	4 559 755	5 105 968	26 435 005

<sup>(</sup>a) Counties Buckingham, Cardwell, Grey, MacDonnell and Robe. (b) Year ended 31 December of previous year until 1935.

Livestock numbers increased steadily through the 1960s and since 1968 beef cattle numbers have accelerated dramatically. Sheep numbers reached a peak of around 5.8 million in 1970 and at 31 March 1975 there were 4.6 million sheep, 795 500 beef cattle and 51 300 dairy cattle in the South East. Beef numbers have increased to the point where this small region now runs half of the

State's cattle and is the major fattening area for the State. Today the pasture requirements of cattle herds exceeds that of sheep. The reversal in an area traditionally known for wool and fat lamb production occurred about 1972. However, the sheep industry is still the major one on an income basis.

### Dairying

Stimulated by overseas demands the dairy industry flourished immediately following the 1939-45 War. War service settlement, private subdivision of larger pasture holdings, pasture improvement and improved stock management led to an increase in dairy cattle numbers to about 70 000 in the late 1950s. There was also a structural change in the production units, as many mixed farms with cream production became larger, solely dairy units capable of supporting a family.

During the 1960s the dairy industry experienced fluctuating fortunes and was often in difficulties. This led to a total reconstruction in the late 1960s and early 1970s. The number of dairy farms dropped markedly, as technical advances in herd and milk handling encouraged larger units. Milk production has risen as a result of better management and a greater proportion of the milk produced is now made into cheese. There is also a tendency for more specialised dairy farms and thus pig farming has also become more specialised.

### Crops

The South East is currently characterised more by its diversity of crops rather than by high production of any one crop. The range includes cereals, pasture seeds, vines, edible oil crops and vegetables.

The cereals, wheat, barley and oats have been the principal crops for more than 100 years but the other crops are more recent. Most were being produced by 1920 but it was not until the 1960s that much larger production increases occurred to develop these crops into individual industries in their own right. Several of these crops developed in response to changes in the grazing industry with pasture seed production responding to the needs from the land clearing and development of the 1950s. Later, edible oil and grain legume crops helped to maintain farm viability when livestock numbers were low. Several crops such as canning vegetables, forestry and vines have expanded to meet either local population needs or national trends.

The increased use of irrigation has had a marked effect on the production of pasture and crops, and has allowed the introduction of several summer growing crops.

Although the proportion of cereals grown in the South East is small (three per cent of the State's wheat and barley and 15 to 20 per cent of the State's oats), the region is able to produce wheat suitable for both bread and biscuit making, some malting quality barley and excellent samples of well-filled oats.

The production of pasture seeds became very important after the 1939-45 War. In the 1950s up to 8 000 hectares, comprising subterranean and strawberry clover, lucerne, phalaris and rye grass seed were harvested annually. Developments in crop management, harvesting techniques and improved quality control have made this region one of the leading seed producing areas in Australia.

Before 1960 potatoes were the most important vegetable crop, production being up to 15 000 tonnes a year. Onion production was also significant. With the development of a vegetable canning industry, peas, sweetcorn and other vegetables are now produced commercially. Celery, carrots, cabbages, cauliflowers also grow well in the region and it is likely that their production will increase in the future.

Although vines were planted and wine was produced in the Coonawarra area before 1900, the South East did not become well known as a wine producing area until after the 1939-45 War. The increase in demand for wine during the 1960s encouraged large increases in vine plantings. As well as expanding the Coonawarra district, major plantings were centred around Padthaway, 45 kilometres north-west of Naracoorte. In the two districts there are a total of 1 600 hectares under vines, but many of the vines are still young.

Two types of crops have been introduced to the region in the last few years. They are the vegetable oil crops, oil seed rape, linseed, sunflower and safflower, and the grain legume crop, lupins.

Linseed has been growing on a small scale for many years, firstly for flax production and later for oil extraction. Used as an industrial oil, its demand has increased and this crop has come into prominence. Similarly, oil seed rape, used both as a light industrial oil and for human consumption, now has a strong market. General changes in diet have provided a ready market also for sunflower and safflower oil, and these crops occupied 10 000 hectares in 1975.

Field peas, a grain legume crop, has been grown in small areas for some time, however, lupins have been developed in the area because of their ability to produce on the deep, poorer quality sandy soils. This high protein crop has increased to 50 000 hectares since 1972 and is valuable as a cash crop, stock feed and soil fertility improver.

Crop	1924-25	1934-35	1944-45	1954-55	1964-65	1974-75
			Tor	ines		
Cereals for grain:	14.000	40.605	# 0#O	20.620	00.040	17.007
Wheat	11 982	13 685	7 070	20 630	32 940	17 094
Barley	4 479	5 504	1 661	11 594	1 413	20 768
Oats	6 846	8 855	4 061	12 959	31 759	15 788
Crops for hay:						
Wheaten	2 233	2 209	9 131	3 141	1 579	777
Barley	50	313	950	1 689	1 226	845
Oaten	38 172	42 009	31 444	22 706	34 312	12 976
Rye	n.a.	n.a.	321	91	616	n.a.
Legume:	.,,,,,	74447			• • • • • • • • • • • • • • • • • • • •	
Field peas	n.a.	n.a.	n.a.	114	276	784
Root crops:	77.001	77.00.	71,001		2.0	,.,
Potatoes	5 268	4 894	26 117	9 903	6 452	16 083
Onions	241	62	992	330	213	1 566
Carrots	3	20	2 339	35	49	804
Grapes, used for:	3	20	4 339	33	47	804
	535	612	530	778	514	14 449
				110	314	14 449
Table	15	3	4			
Vegetables:				_		
Celery	n.a.	n.a.	n.a.	.8	26	n.a.
Cabbages	n.a.	n.a.	47	64	119	78
Cauliflowers	n.a.	n.a.	25	59	83	187

<sup>(</sup>a) Counties Buckingham, Cardwell, Grey, MacDonnell and Robe.

### Forestry

The South Australian Woods and Forests Department was formed in 1875 and a nursery was established near the Leg of Mutton Lake at Mount Gambier in 1876. The first experimental plantings of *Pinus radiata* in the South East were at Mount Gambier Lakes in 1879 and at Mount Burr in 1880. In 1904 the Department set up a sawmill at Moorak, near Mount Gambier, to saw radiata pine. Regular plantings commenced at the Mount Burr and Penola Forest Reserves in 1907.

Pinus radiata, a native of California (USA), is believed to have been introduced into Australia by the Californian gold miners who settled at Ballarat and Bendigo during the gold rushes of the 1850s. It requires a minimum annual rainfall of about 600 mm and it readily adapts to southern Australian conditions. This species is fast growing, has a long fibre wood, is easy to saw, readily accepts preservation treatment and is easy to dry by seasoning. At present Pinus radiata accounts for more than 90 per cent of the plantations in the South East, with Pinus pinaster being planted in a few small areas where, because of less fertile soil, it is better suited than the radiata pine.

New plantations are established on previous farmland or in areas which have already brought one wood crop to harvest. For successful plantations, planting sites need to be cultivated by ploughing or ripping, pests such as rabbits have to be excluded and weed re-growth has to be controlled. The planting of seedlings, previously raised in nurseries, is carried out by hand or, where the area allows, by planting machine, to give approximately 2 000 trees per hectare.

For the first few years the trees must be protected from the competing undergrowth and dense grass, and, in some areas, it is necessary to supplement the soil with chemical fertilisers. Pruning the lower branches of trees early in their life promotes the growth of clear wood and also reduces the fire hazard in the forest.

A plantation may be thinned as many as six times. The first, at age 10 to 14 years, is to remove mostly suppressed and malformed trees. One row in six, called the extraction row, is completely removed to enable trucks to drive through the compartment to load. Subsequent thinnings produce progressively larger diameter logs. Plantations may be clear felled from 35 to 50 years of age. The trees are felled by contract fallers using chain saws and are trimmed from the butt to a top diameter of 75 mm.

Logs vary widely in size because of the simultaneous thinning and clear felling operations. The smallest logs provide the raw material for paper and particle board manufacture and some are pressure-treated for fencing purposes. Larger logs are cut into lengths and sent to the sawmills for the production of floor boards, constructional lumber, furniture stock and packing cases. Some logs, more than 250 mm in diameter, are selected for peeling, and veneer from the knot-free sections is used for the manufacture of ice cream spoons, spatulas and similar products. Edge slabs from the larger logs are used to produce high quality wood chips to be used in the manufacture of particle board and paper.

There are six government forest districts in the South East, viz, Mount Burr and Noolook Forest Reserves, Penola Forest Reserve, Mount Gambier and Kongorong Forest Reserves, Tantanoola Forest Reserve, and Comaum and Cave

Range Forest Reserves. In addition there are private forest lands administered by companies at several locations, mostly adjacent to government plantations. At 31 March 1975 the net area of government plantations in the South East was 59 937 000 hectares.

### **Fishing**

Southern rock lobster is the main product of the fishing industry in the South East. In the 1974-75 season almost 1 000 tonnes of lobster were taken off the South East coast. The main ports of landing are Port MacDonnell, Robe, South End, Beachport and Kingston.

Whole lobster are cooked for marketing in Adelaide and Sydney, and tails are frozen and exported mainly to the United States of America. Plants at Kingston, Robe, Beachport and Port MacDonnell process the lobster for export and local consumption.

Quantities of abalone and school shark are taken also from South East waters.

### Manufacturing

Sawmilling

In 1904 the Woods and Forests Department established a small mill at Moorak, near Mount Gambier, to saw radiata pine thinnings from early plantations. Subsequently several other small mills were erected, with a principal output of packaging materials.

By 1931 a large area of plantations had reached the age at which second and third thinnings could commence and the Department opened a sawmill equipped with a Swedish gang saw at Mount Burr. A similar mill was established at Nangwarry in 1940. Both of these mills have been modernised and now operate fast log band-saws.

In 1958 operations commenced at the Mount Gambier State Sawmill, the largest sawmill of its kind in Australia. At present its log intake is in excess of 140 000 cubic metres annually and it produces flooring, structural timbers, mouldings and industrial packaging materials.

The three major government sawmills have associated thermal electric power stations fed on mill residue. The power stations at Nangwarry and Mount Gambier are connected to the Electricity Trust of South Australia network and contribute to the power supply for the region.

There are many privately owned sawmills in the area, several are in the vicinity of Mount Gambier, one is at Tarpeena, one at Kalangadoo and others are located near the forests. Some of these mills are very flexible, producing a large range of products.

In all there were twelve major and twenty-one small sawmills in the Division in 1975.

### Paper and Paperboard

In 1942 the production of paperboard commenced at the Snuggery Mill, 10 kilometres south of Millicent, and in 1963 a second board machine began production. The major input in this process is timber (from the nearby government

forest) which is ground into pulp. Other raw materials include chemical pulps imported from overseas, waste paper, clay, alum, starch and dyes. The types of board produced include white lined manilla, document and tag manillas, pulp board, triplex board, container board and lined and unlined chip boards.

In July 1960, a small mill utilising forest thinnings to produce toilet tissue began operations near the paperboard mill. In July 1964 the plant was extended by the installation of a toilet tissue rewinder and later the same year an extensive expansion program commenced. This included a high speed tissue machine with associated pulping and bleaching equipment. In 1973 further expansion took place with the introduction of another high speed tissue machine and extensions to warehousing and converting capacity.

The range of base papers produced includes flat tissues, single and two-ply toilet tissues, facial and napkin tissues and paper towelling.

### Particle Boards

Particle boards are pressed-sheet building and joinery boards made from chipped or flaked wood particles cemented with glue under heat and pressure. Sheets of particle board are widely used in furniture, cabinets, partitions, interior walls, ceilings and floors.

At present there are three particle board plants in the region; two are owned by the same company. The first plant was installed in 1956 and its output, characterised by a series of holes, is used for office partitions and prefabricated panels for house construction.

The second plant commenced operations in 1960 and the third in 1967 and their product is used extensively in furniture manufacture.

### Limestone Industry

Mount Gambier limestone, a creamy white stone which is almost pure calcium carbonate, is used extensively for building purposes throughout the surrounding district. This stone was first discovered by early settlers who were clearing scrubland for a road about 15 kilometres west of Mount Gambier.

In mining the building stone, the overburden, which varies in thickness from two to seven metres, is removed and the stone is cut out of the ground in regular dimensions. The main quarry is about six kilometres by two kilometres.

Other quarries near Mount Gambier yield a much softer, less pure, type of limestone. This is used as a base metal in road making and in the manufacture of agricultural lime. Some is also crushed and transported to Adelaide or Melbourne to be used as an additive for stock feed or in the manufacture of paint.

### Carbon Dioxide

Natural carbon dioxide (CO<sub>2</sub>) was first discovered near Mount Gambier in 1966. There are very few commercial CO<sub>2</sub> wells of this type in the world and this is the first commercial CO<sub>2</sub> strike in Australia. It is believed that this field has sufficient carbon dioxide to supply Australia's needs for at least the next 30 years.

At the production plant, after various purification processes, tankers and cylinders are filled with the gas. There is also a small plant for the production of dry ice.

### Wine Industry

In the latter half of the nineteenth century John Riddoch established several fruitgrowing communities in an area known as the Coonawarra Fruit Colony which was part of his vast property, Yallum Park. In 1891 vineyards were established, and wine cellars were built in 1896 on what is now the well known Terra Rosa soil—an area of about 15 square kilometres.

A second winery which concentrated on dry red wines was established in 1908. By this time the original winery which had changed hands several times was specialising in the distilling of brandy and spirits. Since the change in ownership in 1945, however, the original cellars have also concentrated in the production of red wine. Two additional wineries were completed in the 1960s. Several other wine producing companies have holdings in the area and it is likely that they will erect wineries in the future.

The main varieties of grapes grown in the Coonawarra area are Shiraz, Cabernet Sauvignon and Rhine Riesling.

At Padthaway, about 100 kilometres north of Mount Gambier, a further area is being developed for vine growing by several well-known wine producing companies.

At 31 March 1975 there were 1 472 hectares of grape-bearing vines in the South East Statistical Division which, in 1974-75, yielded 14 449 tonnes of grapes to be used in wine production.

### Dairy Products

In the latter half of the nineteenth century the suitability of the milk from the area for cheese production was recognised by local farmers, and surplus milk was made into butter and cheese. Several of the farmers began processing the milk from neighbouring farms, thus becoming specialist manufacturers.

During this period some of the larger properties were subdivided to provide for closer settlement and this resulted in an increasing number of dairy farms. After 1900, a number of larger manufacturers had entered this field; many of these were co-operatives formed by the dairy farmers. The number of factories increased until the 1960s, but since then the tendency has been for the number of manufacturing units to decrease. An example of this was the amalgamation of three co-operatives in 1971.

At 30 June 1973 there were six manufacturing establishments in the South East Statistical Division primarily engaged in cheese production and two with butter production as their major activity.

A large proportion of the cheese produced in this area is transported to Adelaide or interstate.

### Other Manufacturing

Other manufacturing establishments in the South East Statistical Division include an abattoir and meat processing works, a clothing manufacturer, a worsted spinning mill, a vegetable processing factory and a pre-cast concrete manufacturer, all located at Mount Gambier. There is also a large abattoir at Naracoorte.

#### Retail Establishments

At 30 June 1974 there were 664 retail establishments operating in the South East Statistical Division with retail sales valued at \$77.5 million during 1973-74. Of these establishments, 403 were located in the Lower South East Statistical Subdivision.

Almost one-third of the total retail establishments operating in the South East Statistical Division were motor vehicle dealers, petrol and tyre retailers whose retail sales represented 38 per cent of total retail sales for the area. This represented a relatively high proportion when compared with South Australia where 24 per cent of retail establishments were classified to that industry group and had 30 per cent of total retail sales.

There were 24 department, variety and general stores operating in the South East with retail sales of \$8.3 million.

#### **Tourism**

One of the major tourist attractions of the area is the volcanic cones and lakes at Mount Gambier, the major crater containing the Blue Lake which is famous for its unusual colour change in November each year from grey to rich blue and then back to grey again by June.

Other attractions include the pine plantations, the largest softwood forests in Australia, the sawmills which conduct tours of inspection, the limestone caves at Tantanoola and Naracoorte and the varied coastal scenery.

A variety of accommodation establishments is available for tourists to the South East. At 30 June 1974 there were 31 licensed hotels, seven licensed motels, 17 unlicensed motels and two private hotels and guest houses, with a total of 974 guest rooms and 2 287 bed-spaces. There were also 15 caravan parks with 1 040 powered sites, 716 unpowered sites, 74 on-site vans and 44 cabins or units located at caravan parks.

#### Transport

Sea

In the early history of the South East the ports at Kingston, Robe, Beachport, Grey and Port MacDonnell were used extensively for the export of wool and the importing of supplies from Adelaide. However after the rail link with Adelaide was established in the 1880s, these ports declined in importance. Portland, an all-weather deep sea port in Western Victoria now provides a convenient outlet for some agricultural and pastoral products of the South East.

## Road

There are two major road systems in the South East. The eastern area is served by roads from Keith and Bordertown on the National Route 8 (Dukes Highway) which run south through Naracoorte and Penola to Mount Gambier. The coastal towns are served by the Princes Highway which runs south along the coast through Kingston and Millicent to Mount Gambier. A network of minor roads links the smaller towns in the South East.

A highly efficient road transport system serves the area well for transportation of timber, general merchandise, livestock, frozen foods, petroleum products, chemicals and bulk liquid carbon dioxide.

Regular passenger bus services operate between Mount Gambier and Adelaide, nearby Victorian towns and Melbourne.

#### Rail

Rail connection between Adelaide and the South East has been operating since the 1880s. Today an air-conditioned rail car passenger service operates daily (except Sundays) on the 491 kilometre route from Adelaide to Mount Gambier, passing through Bordertown, Naracoorte and Penola. An overnight service with sleeping car accommodation is available three nights a week. A passenger service operates three days a week between Naracoorte and Kingston. Goods trains, including express overnight services run frequently to both Adelaide and Melbourne.

#### Air

Mount Gambier has a government-owned all-weather airport with sealed runways and a daily air service to Melbourne and Adelaide. There are licensed aerodromes at Millicent and Naracoorte.

#### Media

The South East is served by three radio stations, 5MG Mount Gambier and 5PA Naracoorte operated by the Australian Broadcasting Commission, and 5SE Mount Gambier, a commercial radio station. Two television stations operate in the area, the national station ABGS1 and the commercial station SES8.

A local newspaper 'The Border Watch' established in 1861, is published triweekly in Mount Gambier and papers from Adelaide and Melbourne are available daily in the larger towns. APPENDIX A

# STATISTICAL SUMMARY

In the next 22 pages, a historical summary of some of the more important statistics relating to South Australia is shown. This is intended to present a general picture of the development of the State, with details being given (wherever they are available) for every fifth year for the period 1836-1951, and for each single year thereafter. Naturally the range of statistics available for the early years of the colony is very limited, and in addition it is not always possible to achieve perfect comparability in presenting details covering a period in excess of 130 years. Generally, all series on each page relate to either financial or calendar years but some financial year series have been included on pages which contain information shown in calendar years.

The first year shown on each page is the earliest for which any series on that page is available. Blanks at the top of some columns indicate that information relating to these particular series either was not collected or is not available for these early years, or is not available on a basis comparable to more recent statistics.

All major breaks in series are covered by footnotes, but minor changes are not so recorded, and the statistics should be interpreted with this in mind. An example can be quoted from the table on deaths from principal causes (page 701) where comparability is affected somewhat by changes in classification, particularly in 1950, but no footnote to this effect has been included.

The following standard symbols have been used throughout the summary:

- n.a. not collected, not available for publication
- nil
- p preliminary information subject to revision
- \* not yet available
  - ---- break in continuity of figures

# POPULATION(a)

							Population	Growth	
	Year			n Estimate	at 31 Dec.	Recorded Natural Increase (b)	Rate of Natural Increase (c)	Total Increase	Rate of Popula- tion Growth
			Males	Females	Persons			62.	<u> </u>
1836 1841 1846 1851 1856			309 8 755 14 711 37 321 56 264 67 409	237 6 730 11 182 29 217 51 622 63 403	546 15 485 25 893 66 538 107 886 130 812	577 1 786 3 341 3 589	22·29 26·85 30·97 28·00	546 855 3 433 2 838 10 499 5 230	5·84 15·29 4·46 10·78 4·17
1866 1871 1876 1881			88 024 97 019 116 894 152 453 160 814	80 883 91 625 107 666 133 518 145 896	168 907 188 644 224 560 285 971 306 710	4 029 4 704 4 674 6 696 6 943	24·39 25·21 21·51 23·81 22·54	7 430 4 098 14 484 9 578 —2 603	4·60 2·22 6·89 3·47 —0·84
1891 1896 1901 1906		·	168 826 179 024 (d)180 440 184 803 214 061	155 895 173 043 (d)178 890 181 710 205 331	324 721 352 067 (d)359 330 366 513 419 392	6 526 5 974 (d) 5 105 5 049 7 019	20·23 16·95 14·29 13·90 17·05	5 774 99 (d) 2 080 3 892 12 530	1·81 0·03 0·58 1·07 3·08
1916 (e) 1921 1926 1931			212 585 251 170 285 013 289 397 294 835	229 253 250 572 275 912 287 682 294 935	441 838 501 742 560 925 577 079 589 770	6 780 6 992 6 606 4 191 3 447	15·35 14·07 11·92 7·28 5·86	-4 147 10 736 13 877 2 612 3 008	-0.93 2.19 2.54 0.45 0.51
1941 (e) 1946 (e) 1951 1952		· · · · · · · · · · · · · · · · · · ·	301 645 317 238 375 188 388 433 397 610	304 721 323 180 368 597 380 137 388 055	606 366 640 418 743 785 768 570 785 665	4 677 9 352 10 279 10 834 11 194	7·78 14·72 14·03 14·35 14·42	7 310 9 536 20 942 24 785 17 095	1·22 1·51 2·90 3·33 2·22
1954 1955 1956 1957		· · · · · · · · · · · · · · · · · · ·	409 733 423 042 436 807 448 411 458 401	398 517 411 619 425 145 437 841 449 652	808 250 834 661 861 952 886 252 908 053	11 048 10 958 11 371 11 960 12 304	13·87 13·36 13·40 13·68 13·72	22 585 26 411 27 291 24 300 21 801	2·87 3·27 3·27 2·82 2·46
1959 1960 1961 1962		· · · · · · · · · · · · · · · · · · ·	471 868 483 802 493 356 501 920 513 255	462 629 473 220 483 765 493 910 506 535	934 497 957 022 977 121 995 830 1 019 790	12 429 13 162 14 584 13 129 13 166	13·49 13·93 15·03 13·32 13·06	26 444 22 525 20 099 18 709 23 960	2·91 2·41 2·10 1·91 2·41
964 965 966 967			527 594 542 635 554 000 559 300 566 700	521 557 537 312 549 800 556 700 565 400	1 049 151 1 079 947 1 103 700 1 115 900 1 132 100	11 960 12 103 11 017 11 315 11 291	11·56 11·38 10·07 10·19 10·06	29 361 30 796 20 684 12 186 16 211	2·88 2·94 1·92 1·10 1·45
1969 1970 1971 1972 1973 1974			574 700 584 400 591 700 596 100 603 200 617 700	574 700 585 900 593 800 600 400 608 000 621 400	1 149 400 1 170 200 1 185 500 1 196 500 1 211 100 1 239 100 p1 241 700	12 640 12 479 13 310 12 080 10 572 9 945 10 039	11·09 10·77 11·31 10·16 8·84 8·15 8·11	17 238 20 855 15 265 11 046 14 593 27 930 2 663	1·52 1·81 1·30 0·93 1·22 2·31 0·21

<sup>(</sup>a) Figures before January 1966 exclude full-blood Aborigines. (b) Births and deaths of full-blood Aborigines, where identified in registrations, have been excluded from natural increase figures before 1 January 1966. (c) Excess of births over deaths per 1 000 of mean population. (d) Northern Territory included before 1901, but subsequently excluded. (e) During the 1914-18 War, defence personnel leaving the State were treated as departures, but during the 1939-45 War they were retained in the population and troops of other States and countries were excluded.

## **DEMOGRAPHY**

	Live	Births	Infant D	eaths (a)			Deaths		
Year								from Pri Causes (b)	
	Number	Rate (b)	Number	Rate (c)	Number	Rate (b)	Diseases of the Heart	Cancer	Tuber- culosis
1846	937 2 759 4 488 5 551 6 782 7 082 8 224 10 708	36·19 41·47 41·60 43·30 41·06 37·95 37·84 38·08	539 610 1 064 1 385 851 1 228 1 364	195·36 135·92 191·68 204·22 120·16 149·32 127·38	360 973 1 147 1 962 2 753 2 378 3 550 4 012	14·02 14·62 10·63 15·30 16·67 12·74 16·34 14·27		0·05 0·08 0·16 0·18 0·35 0·32	0·98 1·25 1·25 1·05 1·22 1·16
1886	10 012	36·29 33·36 28·44 25·41 24·57	1 409 976 1 015 909 675	126·06 90·77 101·02 100·12 75·66	4 234 4 211 4 038 3 974 3 872	13·75 13·08 11·47 11·12 10·66		0·34 0·49 0·53 0·60 0·77	1·34 1·31 1·17 1·06 1·08
1911	11 974 11 483 9 079	28·86 26·85 24·09 20·73 15·77 15·16	670 868 784 509 330 277	60·60 73·21 65·48 44·33 36·35 31·09	4 038 5 077 4 982 4 877 4 888 5 464	9·81 11·50 10·02 8·81 8·49 9·29	1·04 1·29 1·13 1·00 1·39 1·87	0·74 0·81 0·92 0·96 1·20 1·26	0·85 0·93 0·80 0·71 0·58 0·40
1941	11 278 13 145 13 311	18·24 18·51 21·43 21·49 22·38	356 448 482 387 394	32·47 39·72 36·67 29·07 28·08	6 288 6 712 6 482 5 984 6 049	10·46 11·02 10·57 9·66 9·65	2·62 2·73 2·82 2·64 2·87	1·26 1·25 1·31 1·27 1·23	0·37 0·41 0·35 0·30 0·32
1946	. 16 317 . 15 870 . 16 042	24·90 25·23 24·00 23·58 24·39	428 396 472 444 416	27·07 24·27 29·74 27·68 24·04	6 461 6 215 6 748 6 373 6 740	10·17 9·61 10·20 9·37 9·50	3·03 2·86 3·08 2·90 3·05	1·29 1·28 1·42 1·23 1·24	0·29 0·30 0·28 0·21 0·19
1951	. 17 884 . 18 156 . 18 227	23·84 23·69 23·39 22·89 22·55	428 413 375 388 431	24·51 23·09 20·65 21·29 23·30	7 184 7 050 6 962 7 179 7 536	9·81 9·34 8·97 9·01 9·19	3·24 3·10 3·00 3·11 3·12	1·24 1·29 1·27 1·22 1·28	0·15 0·12 0·06 0·08 0·06
1956	. 19 536 . 20 047 . 20 372	22·35 22·35 22·35 22·12 22·19	377 403 449 422 397	19·88 20·63 22·40 20·71 18·94	7 593 7 576 7 743 7 943 7 804	8·95 8·67 8·63 8·62 8·26	3·24 2·91 2·93 2·89 3·06	1·16 1·29 1·26 1·22 1·21	0·05 0·05 0·07 0·05 0·04
1961 1962 1963 1964 1965	. 21 361 . 21 367 . 20 866	23·09 21·67 21·20 20·16 19·63	448 409 399 397 385	20·00 19·15 18·67 19·03 18·43	7 815 8 232 8 201 8 906 8 788	8·06 8·35 8·14 8·61 8·26	2·92 3·06 2·99 3·24 3·11	1·26 1·37 1·27 1·32 1·30	0·06 0·03 0·04 0·01 0·03
1966 (d)	. 20 386 . 21 207 . 21 977	18·61 18·37 18·89 19·28 19·52	364 346 345 347 367	17·88 16·97 16·27 15·79 16·23	9 345 9 071 9 916 9 337 10 138	8·54 8·17 8·83 8·19 8·75	3·22 3·09 3·29 2·96 3·20	1·32 1·35 1·41 1·47 1·43	0·02 0·02 0·02 0·02 0·01
1971 1972 1973 1974 1975	. 21 844 . 20 407 . 20 181	19·55 18·37 16·97 16·52 16·15	366 367 276 312 222	15·92 16·80 13·52 15·46 11·11	9 686 9 764 9 835 10 236 9 947	8·23 8·21 8·18 8·40 8·04	2.91 2.97 2.98 3.01 2.88	1·41 1·48 1·49 1·51 1·54	0·02 0·01 0·01 0·01 0·01

<sup>(</sup>a) Under one year of age from 1871, under two years of age in prior years.
(b) Rate per 1 000 of mean population. (c) Rate per 1 000 live births registered.
(d) Vital events of full-blood Aborigines, where identified in registrations, were excluded before 1966.

# SOCIAL DEVELOPMENT

# Marriages and Divorces; Law and Order

	Mar	riages			Court C	onvictions	Polic	e
Year	Total	Rate (a)	Divorces (b)	Bank- ruptcies	Supreme Court (c)	Courts of Summary Juris- diction (d)	Active Strength	Net Expen- diture by State
1841	220 189 1 171 1 158	8·50 2·84 10·85 9·03		36 16 106 88 115	37 40 103 85 62	2 919 3 025	127 174 151	\$*000
1866	1 299 1 250 1 852 2 308 1 976	7·86 6·70 8·52 8·21 6·42	10	252 247 200 696 535	107 91 129 213 121	4 341 4 864 7 905 13 231 6 808	208 187 257 371 401	90 74 108 164 178
1891 1896 1901 1906	2 315 2 183 2 304 2 679 4 036	7·21 6·20 6·45 7·38 9·80	5 6 6 3 20	142 240 165 172 190	85 110 98 92 74	6 918 5 149 4 968 5 249 7 303	388 347 359 373 423	172 150 152 153 183
1916 1921 1926 1931	3 602 4 383 4 503 3 069 5 182	8·16 8·82 8·13 5·33 8·81	14 88 71 138 213	324 155 439 996 551	52 97 174 274 171	7 145 8 968 21 417 14 760 14 920	541 566 633 763 701	262 391 499 641 570
1941	6 855 6 700 6 668 6 704 6 247 6 585	11·40 10·55 10·31 10·14 9·18 9·28	273 654 695 630 590 661	284 23 32 32 52 44	177 231 246 185 205 207	21 990 (e) 20 585 24 491 24 164 22 834 25 496	707 (e) 830 833 869 928 942	689 (e) 819 888 1 052 1 208 1 398
1951	6 646 6 241 6 149 6 190 6 226	9·07 8·27 7·92 7·77 7·59	637 581 628 594 624	53 76 91 89 106	307 328 330 312 340	28 675 27 432 30 229 25 482 29 264	913 952 982 986 969	1 647 2 073 2 429 2 617 2 517
1956	6 277 6 581 6 505 6 614 6 607	7·40 7·53 7·25 7·18 6·99	567 529 483 503 610	150 244 278 366 368	362 459 457 499 580	28 221 30 658 32 621 34 203 42 531	1 018 1 143 1 183 1 243 1 301	3 060 3 303 3 677 4 084 4 499
1961 1962 1963 1964 1965	6 804 7 021 7 302 7 765 8 680	7·01 7·12 7·24 7·50 8·16	718 685 765 887 852	561 620 584 675 582	606 718 745 629 713	52 155 53 531 57 189 55 408 62 238	1 376 1 466 1 441 1 496 1 558	5 043 5 651 5 825 6 245 6 912
1°66	9 051 9 434 9 652 10 599 10 864	8·27 8·50 8·60 9·30 9·38	1 069 929 915 963 939	648 660 759 659 611	738 707 692 712 (f) 694	71 694 87 110 105 027 105 966 114 499	1 595 1 660 1 777 1 845 1 881	7 319 8 417 9 137 9 568 10 621
1971	10 833 10 829 10 806 10 769 9 843	9·21 9·10 9·01 8·84 7·95	1 264 1 235 1 582 1 561	(g) 626 643 554 373 437	931 964 982 906	110 543 123 063 (h) 94 068 93 037	1 971 2 063 2 167 2 264 2 461	12 181 12 961 15 107 19 334 28 035

<sup>(</sup>a) Rate per 1 000 of mean population. (b) Dissolutions made absolute. (c) Distinct persons only. (d) Each type of offence counted separately when there are multiple charges against an individual. (e) Year ended 30 June from 1943. (f) From late 1970 covers also District Criminal Courts to which some jurisdiction transferred. (g) Year ended 30 June from 1971. (h) Excludes juvenile offenders from 1973.

## SOCIAL DEVELOPMENT

## Education

		+ .	Pri	mary and S	econdary			Ter	tiary	Further
Y	ear –	Govern	ment Scho	ools (a)	Non-g	overnment	Schools	Uni- versities	Colleges of	Ctudant
	_	No.	Stu	dents	No.	Stuc	lents	C4J4.	Advanced Education	Enrol-
		NO.	Primary	Secondary	No.	Primary	Secondary	(b) Students		ments
1851 1856 1861 1866		115 147 219 292	3 031 6 516 10 711 14 690		236 n.a.					
1871 1876 1881 1886 1891		307 281 405 504 552	15 791 25 889 36 888 44 405 47 094		n.a. 326 363 n.a. 285			58 74 197 246		
1896 1901 1906 1911 1916		639 706 708 743 857	59 944 63 183 57 270 53 494 63 935	1 800 3 047	232 230 215 179 (d) 218	(c) 9 (c) 11 (d) 12	121	320 591 626 641 491		
1921 1926 1931 1936 1941		973 1 019 1 075 1 100 1 006	77 111 79 204 81 218 75 411 63 303	3 067 6 527 10 503 9 280 10 761	171 188 186 174 167	13 16 14 13	951 139 310 993 915	1 338 1 575 2 092 2 025 2 211		
1946 1947 1948 1949 1950		811 782 773 759 743	61 242 63 853 66 653 71 337 76 369	11 870 11 723 11 550 11 922 12 732	145 143 142 146 148	16 17 18	310 468 169 426 655	3 723 4 045 4 266 4 126 4 069		
1951 1952 1953 1954 1955		728 716 723 716 701	81 642 89 630 97 262 105 022 111 909	14 106 15 121 16 933 17 972 19 485	146 146 148 157 157	22 23 24	677 393 631 949 840	3 720 3 612 3 565 3 555 3 617		
1956 1957 1958 1959 1960		699 694 674 668 681	118 365 123 132 125 678 129 850 132 372	22 134 24 734 28 189 33 042 37 901	163 163 161 162 163	30 32 33	050 504 425 896 703	3 828 4 424 4 816 5 300 5 723		
1961 1962 1963 1964 1965		688 682 682 685 700	135 274 136 924 140 520 145 042 150 809	41 889 46 499 49 637 54 026 57 811	165 164 166 170 172		652 (e)11 440 12 354 12 890 13 007	6 250 6 824 7 416 8 203 8 658		
1966 1967 1968 1969 1970		700 674 683 676 681	154 253 157 424 157 997 159 682 156 922	60 834 65 630 68 814 71 599 71 866	172 173 171 171 170	24 188 23 533 22 814 22 257 22 464	12 999 13 469 13 599 14 203 14 642	9 364 9 658 9 803 10 128 10 176	3 420 3 443	
1971 1972 1973 1974 1975		(f) 662 615 614 613 619	156 458 154 886 152 698 152 901 151 975	74 982 77 926 79 088 79 578 82 737	169 163 163 157 151	22 669 22 232 21 929 22 399 22 479	15 018 15 233 15 806 16 494 16 818	10 682 11 124 11 497 12 264 12 876	4 242 (g) 4 291 6 662 12 163 13 773	78 540 78 214 88 154 91 421

<sup>(</sup>a) Net enrolment to 1969, thereafter at census date (at or about 1 August). Includes Northern Territory before 1958. (b) Excludes students at Conservatorium of Music not also enrolled for degree or diploma subject. (c) On last school day. (d) Non-goverment schools compulsorily registered, previous years incomplete. From 1916 to 1961 net enrolment including Northern Territory. (e) From 1962 at census date (at or about 1 August). Excludes Northern Territory. (f) From 1972 includes only primary and secondary, before 1972 included technical institutions. (g) In approved courses at colleges of advanced education.

# SOCIAL DEVELOPMENT

## Health

		Public 1	Hospitals		Mental H	ospitals (a)	- Medical	General
			Reve	nue			Practi-	Nurses
Year	Number of Hospitals	Patients Treated	Govt Aid	Total	- Ad- missions During Year	Patients at end of Year	tioners Registered	Registered
			\$'000	\$'000		_		
846 851 856 861 871 876		413 559 795 1 257 1 433 2 282			10 9 69 68 88 111 149	6 11 73 167 224 324 427	22 68 101 111 85 77 94	
881 886	1 1	2 282 2 258 2 022			199 207	606 744	113 152	
891 1896 1901	1 1 1 9	2 301 2 633 3 554 4 476 8 547	96	132	224 195 214 231 273	815 934 988 994 1 084	177 279 341 242 299	
916 921 1926 1931	27 31 45 51	12 453 15 642 22 438 26 505 34 014	130 254 467 356 383	186 397 730 574 730	302 272 249 250 272	1 158 1 190 1 282 1 395 1 627	326 360 445 457 477	1 271 1 601 1 886
1941 1942 1943 1944 1945	55 55 57 58 (b)	40 593 40 137 41 620 43 582 (b)	607 625 642 762 (b)	1 063 1 200 1 301 1 479 (b)	247 219 197 276 (b)	1 905 1 892 1 889 1 925 (b)	814 839 846 866 883	2 562 2 768 2 914 3 006 3 153
1946 1947 1948 1949 1950	58 59 59 60 59	46 696 52 388 50 480 53 558 54 334	836 1 135 1 382 1 671 2 109	1 697 2 133 2 476 3 065 3 719	302 332 330 398 379	2 024 2 107 2 165 2 213 2 310	947 983 1 012 1 053 1 111	3 314 3 380 3 589 3 808 4 018
1951 1952 1953 1954	60 61 62 62 63	57 401 59 374 61 681 62 138 64 310	2 694 3 739 4 673 4 340 5 524	4 503 6 110 7 442 7 386 8 819	452 426 498 548 516	2 411 2 425 2 534 2 644 2 612	1 172 1 244 1 202 1 265 1 348	4 199 4 461 4 585 4 724 4 884
	65 65 64 65	69 295 73 249 75 282 79 426 82 948	8 214 11 370 10 425 10 260 10 474	11 702 15 449 15 372 15 638 16 829	553 543 659 712 1 637	2 658 2 594 2 667 2 643 2 810	1 395 1 469 1 507 1 601 1 681	5 026 5 122 5 475 5 583 5 817
1961 1962 1963 1964 1965	66 65 65 65	87 386 89 409 94 144 99 491 105 098	10 155 10 366 10 007 12 094 14 171	17 414 18 350 19 307 21 166 24 084	1 846 1 925 2 604 3 132 3 061	2 833 2 914 2 799 2 838 2 752	1 739 1 821 1 883 2 002 2 080	6 123 6 523 6 879 7 255 7 699
1966 1967 1968 1969	67 65 65 65	111 313 117 693 122 835 132 864 135 433	19 681 22 138 16 626 21 364 23 198	30 386 34 532 31 039 37 064 41 500	2 810 2 866 2 733 2 964 3 378	2 646 2 497 2 465 2 283 2 269	2 175 2 282 2 372 2 474 2 568	8 065 8 467 8 832 9 275 9 855
1971 1972 1973 1974 1975	67 68 69 70 71	139 842 150 964 162 237 169 476 173 170	32 971 42 373 44 832 62 945 93 721	53 942 69 935 75 894 99 382 146 300	3 527 3 602 3 225 3 309	2 193 2 159 2 208 2 123	2 707 3 054 3 154 3 348	10 506 11 201 11 923 12 717

<sup>(</sup>a) From 1959-60 covers all in-patients (certified and voluntary) in institutions. Before this covered only certified patients in two 'long-term' institutions.(b) Year ended 30 June from 1946.

# SOCIAL DEVELOPMENT Social Welfare

-	Year	Children Main- tained or Sub- sidised by SA Govt	Pension	s and Bene by Austr	efits Paid valian Gov		ustralia	Pens	ioners
	1 ear	Expendi- ture	Age and Invalid	Disability and Service Pensions (a)	Child Endow- ment	National Health Services	Total (includes Other)	Age and Invalid	Disability and Service (a)
1895-96 1900-01		. 28·4 . 35·4		\$'000		•		Nun	nber
1905-06 1910-11 1915-16 1920-21 1925-26		. 38·2 . 46·4 . 67·0 . 95·0 . 100·7	544 910 1 404	20 1 028 978			2 060 2 496	7 237 10 993 12 320 14 098	794 14 663 16 144
1930-31 1931-32 1932-33 1933-34 1934-35		. 103·7 . 95·2 . 90·9 . 88·8 . 87·8	1 982 1 878 1 826 1 896 2 068	994 908 844 854 892			3 074 2 848 2 726 2 804 3 016	20 602 21 897 21 461 22 805 24 517	16 653 15 801 15 517 15 352 15 248
1935-36 1936-37 1937-38 1938-39 1939-40		. 89·4 . 89·4 . 93·7 . 94·0 . 99·2	2 298 2 522 2 868 2 836 2 908	942 1 036 1 076 1 098 1 104			3 298 3 622 4 010 4 008 4 086	26 134 27 308 28 039 28 857 29 521	15 997 16 340 16 865 16 680 16 145
1940-41 1941-42 1942-43 1943-44 1944-45		. 101·4 . 106·6 . 113·3 . 131·5 . 143·1	3 032 3 274 3 628 3 688 3 624	1 088 1 108 1 274 1 654 1 838	1 720 1 810 1 908 1 870		4 192 6 162 7 076 8 076 8 276	29 642 28 422 27 423 27 530 27 507	15 424 15 296 16 333 18 472 22 071
1945-46 1946-47 1947-48 1948-49 1949-50		. 155·2 . 197·8 . 224·4 . 255·6 . 287·5	4 670 5 102 6 284 7 170 7 888	2 272 2 692 3 046 3 718 4 178	2 854 3 196 3 212 4 024 4 938	244 856 770 1 054 1 220	11 262 13 212 14 708 17 442 19 966	29 512 32 387 34 229 35 470 36 524	30 687 35 117 38 505 42 931 47 303
1950-51 1951-52 1952-53 1953-54 1954-55		337·6 . 446·7 . 466·8 . 475·7 . 491·2	8 600 10 360 12 616 14 150 15 310	5 214 6 442 7 130 7 686 8 778	7 564 8 298 9 540 9 154 9 428	2 122 3 554 4 154 4 880 5 824	25 216 30 532 25 878 38 202 41 560	36 582 37 363 39 700 42 216 45 147	51 589 54 758 58 591 61 039 63 767
1955-56 1956-57 1957-58 1958-59 1959-60		. 553·0 . 494·0 . 545·6 . 674·6 . 778·1	17 718 19 244 21 432 23 150 26 366	9 074 9 575 10 664 10 860 12 697	10 998 10 500 10 860 12 618 11 794	6 140 6 710 7 704 9 868 11 977	46 322 48 926 54 256 60 460 66 157	47 754 50 209 52 699 55 181 57 336	66 535 68 291 69 852 71 331 72 013
1960-61 1961-62 1962-63 1963-64 1964-65		914·8 1 107·5 1 129·9 1 275·5 1 516·8	28 537 32 844 33 951 36 120 38 509	13 722 14 241 14 867 16 224 16 006	14 092 12 671 12 861 15 916 16 563	12 811 14 567 16 066 17 080 18 948	73 594 80 283 83 393 91 514 96 362	60 483 64 374 64 156 65 573 66 798	72 695 74 454 73 239 72 518 70 678
1965-66 1966-67 1967-68 1968-69 1969-70		. 1716.6 . 1914.4 . 2008.2 . 2235.9 . 2466.6	39 691 43 720 46 711 50 828 58 720	17 692 16 776 17 252 19 065 19 435	16 988 19 063 17 835 18 162 20 287	21 254 23 100 25 448 28 411 33 476	102 661 111 394 116 625 128 940 145 857	67 999 70 521 74 016 76 616 85 076	68 439 66 624 65 078 62 986 61 928
1970-71 1971-72 1972-73 1973-74 1974-75		. 2 912·8 . 2 628·5 . 3 079·3 . 3 537·7 . 4 858·0	64 714 76 545 101 625 131 771 184 218	20 405 22 493 25 917 31 350 41 774	18 284 19 766 22 780 20 098 20 237	41 773 50 587 57 254 65 807 82 942	161 687 189 255 236 150 291 625 400 034	88 936 92 771 104 350 116 117 123 627	60 406 58 682 59 707 59 522 59 161

<sup>(</sup>a) From 1974-75, war pensions called disability pensions.

# EMPLOYMENT AND UNEMPLOYMENT

		Wage and Earners (a)		ctory yment (b)		ural yment (c)		oloyment nefits	Unem- ployed Regis-
Year	Males	Females	Males	Females	Males	Females	Average No. on Benefit	Amount Paid	tered
	'000	'000	'000	'000	'000	'000		\$'000	
1911 1925-26 1930-31	• •		22·6 33·1 19·3	5·3 6·9 4·6	38·8 38·9	3·2 2·6			1 391 23 588
1931-32 1932-33			18·9 20·9	4·9 5·4	39·2 39·7	2·8 3·1			23 738 20 516
1933-34 1934-35 1935-36 1936-37 1937-38	•		23·7 27·3 31·4 33·4 36·3	5·7 6·2 7·1 7·3 7·8	40·0 41·4 41·7 42·3 41·4	3·4 3·1 2·6 3·0 2·9			16 559 13 111 10 970 8 033 7 737
1938-39 1939-40 1940-41 1941-42 1942-43			35·4 36·3 40·1 49·9 52·8	8·0 8·7 10·8 15·3 20·0	41·3 38·7 n.a. n.a. 29·6	2·5 2·8 n.a. n.a. 5·1			8 574 5 978 1 745
1943-44 1944-45 1945-46 1946-47 1947-48	• • •		50·7 49·1 49·5 56·7 59·1	18·9 16·4 13·7 14·0 14·3	32·9 33·6 35·7 38·1 38·1	6·5 6·2 5·5 5·0 5·8	778 200 51	146·4 40·2 8·0	3 147 1 310 778
1948-49 1949-50 1950-51 1951-52 1952-53	· · ·		60·9 63·1 66·8 68·0 67·1	14·9 15·3 16·2 15·9 13·4	38·1 38·6 36·9 37·4 38·3	5·5 7·0 6·1 4·7 5·0	14 326 6 17 841	1·2 66·2 0·8 2·0 264·0	654 431 406 1 613 2 343
1953-54 1954-55 1955-56 1956-57 1957-58	. 193.3	55·7 60·1 64·0 64·1 65·9	70·7 73·7 76·1 75·5 75·9	14·8 15·9 16·4 16·4 16·6	37·8 37·6 37·3 36·4 35·2	5·6 5·0 4·7 3·9 2·7	270 66 77 681 1 534	100·4 24·8 22·2 227·4 611·0	964 1 207 1 948 3 363 5 082
1958-59 1959-60 1960-61 1961-62 1962-63	. 206.4	68·4 72·6 72·3 76·7 80·9	77·4 81·3 81·9 81·8 86·7	16·7 17·7 18·1 17·3 18·6	35·0 33·8 34·0 33·7 33·3	3·6 2·6 2·3 2·1 1·9	1 641 1 223 1 610 3 643 2 244	724·8 498·2 685·6 1 785·6 1 184·7	3 958 4 547 9 035 6 886 6 479
1963-64 1964-65		86·0 93·4	90·9 94·7	19·9 21·5	33·2 32·6	1·4 1·3	1 513 800	751·1 390·4	4 339 3 533
1965-66 . 1966-67 1967-68		(e) 106·1 109·8 116·2	96·2 96·1 98·9	22·1 22·1 22·5	32·1 31·3 29·7	1.0 0.8 0.7	1 306 3 094 3 299	708·9 1 653·2 1 637·4	7 357 8 484 8 359
1968-69 1969 <b>-</b> 70	. 261·6 . 266·6	121·4 129·9	(f) 91·0 94·6	(f) 22·1 23·8	29·4 28·9	0·6 0·6	2 576 1 636	1 286·1 1 008·4	6 300 6 360
1970-71 . 1971-72 1972-73	(g) 263·6 263·4 270·5	(g) 133·5 136·8 145·9	n.a. 96·2 95·6	n.a. 25·4 25·8	28·2 27·3 27·1	0·5 0·5 0·4	2 043 3 564 4 350	1 378·3 2 930·1 5 106·9	7 975 12 328 9 339
1973-74 1974-75	. 278·4 . 278·3	161·0 159·5	98.7	29·4 *	26·6 26·6	0·4 0·3	3 246 10 941	6 142·9 20 474·8	(h) 7 983 20 336

<sup>(</sup>a) At June; includes all industries except rural, defence forces and private domestic service.

(b) Average employment including working proprietors during the year.

(c) Permanent employees only. (d) Includes Northern Territory registrations.

(e) From June 1966 a new definition of Labour Force (affecting mainly females) was adopted. (f) Direct comparisons with figures for previous years are not possible because of changes in the scope of the census and in the census units. (g) From June 1971 excludes trainee teachers, some of whom were classified as wage earners for earlier periods. Figures from June 1971 to June 1974 revised using 1971 census benchmarks. (h) From July 1973 the definition of school leavers was changed.

WAGES

Year	State Livir	ng Wage (a)	and Minin	l Basic num Wage (a) (d)	Minimum Weekly Wage Rates (b)		
_	Males	Females	Males	Females	Males	Females	
911	\$	\$	\$ 5·10	\$	\$	\$	
916	5.40		6.15		5.90	2.48	
921	7.95	3.50	7.95		8.94	4.52	
926	8-55	3.95	8.55		9.57	5.00	
931	6.30	3-15	5.81		7.50	4.39	
932	6.30	3.15	5.72		7.26	4.09	
933	6.30	3.15	5.96		7.34	4.10	
934	6.30	3.15	6.30	,	7.55	4.19	
935	6.60	3.15	6.70		7.79	4.24	
936	6.60	3.30	6.90		7.95	4.33	
937	7-40	3.65	7.40		8-58	4.68	
938	7.40	3.65	7.60		8.71	4.78	
939	7.80	3.80	7.70		9.41	4.96	
940	8.40	4.10	8.00		9.85	5-21	
941	8·70 9·40	4·35 4·62	8·40 9·30		10·58 11·50	5·54 6·02	
943	9·40 9·40	4.62	9.40		11.61	6.12	
944	9.40	4·62 4·62	9·30 9·30		11·58 11·60	6·53 6·72	
946	9.40	5.50	10·20		12.41	7.60	
947	10.60	5.90	10.60		13.78	8.80	
948	11.70	6.65	11.60		15.22	9.51	
949	12.50	6.85	12.60		16.44	10.10	
950	15.80	11.85	15.80	11.85	19.79	14.21	
951	19.50	14.60	19.50	14.60	23.60	17.02	
952	22.90	17-15	22.90	17-15	27.08	19-68	
953	23.10	17.30	23.10	17.30	27.35	19-91	
954	23.10	17.30	23-10	17-30	28.16	19.99	
955	23.10	17.30	23.10	17.30	28.50	20.18	
956	24·10 25·10	18·05 18·80	24·10 25·10	18·05 18·80	29·63 30·69	20.92	
					30.09	21.95	
958	25.60	19-20	25.60	19-20	31.24	22.38	
959	27·10 27·10	20.30	27.10	20.30	33.99	23.92	
961	28.30	20·30 21·20	27·10 28·30	20·30 21·20	34·22 35·46	24·29 25·20	
962	28.30	21.20	28.30	21.20	35.65	25.23	
963	28.30	21.20	28.30	21.20	36-40	25.52	
964	30.30	22-70	30·30	22.70	38.69	27.29	
965	30.30	22.70	30.30	22 70	39.48	27.75	
966	32.30	24.20	32.30	24.20	41.75	29.42	
967	33-30	25.20	(c) 37·05	2.23	43.79	31.32	
968	34-65	26.55	38-40		48.23	33.60	
969	(d) 34·65	(d) 26.55	41.90		50.76	35.94	
970	(d) 34·65	(d) 26.55	41.90		52.12	37-51	
971	37.85	29.00	45.90		59.38	44.16	
972	39.85	31.00	50.60		65.82	50.50	
973	43.15	34-10	59.60		75.20	62.11	
974	46.50	37.30	67.60	(e) 60·80	p 103·32	p 91·47	
975	(f)	( <i>f</i> )	9	2.40	p 115·11	p 103-20	

<sup>(</sup>a) At end of year. (b) Adult rates, at end of year, for all industries excluding rural.

(c) Provisions for minimum wages (for adult males only) were inserted in Federal Awards in July 1966 and basic wages were replaced by the total wage concept in July 1967. (d) An economic loading of 3 per cent of the sum of the living wage plus margin was added to all award rates of pay from December 1969 to January 1971. (e) Between May 1974 and June 1975 the minimum wage for adult males was extended to adult females in three steps. (f) Increased to \$48.20 and \$38.60 for males and females respectively from May 1975 and abolished in September 1975, award rates thereafter being specified as total wages.

# PRICES

		Reta	il Price Inc	lexes: Ad	elaide			ltural Pro icipal Mar	
Year	·c	" Series (	a)	C	Consumer (	b)	Wheat	Barley	Wool
	Food and Groceries	Rent	All Groups	Food	Housing	All Groups	(per tonne) (c)	(per tonne)	(per kg)
1901	. 575						\$	\$	cents
1911 1916 1921	. 549 . 570 . 835 . 941 . 1 045	573 819 927	798 989 1 026				12·71 17·45 29·39 22·82	16·53 14·33 19·49 17·64	15·59 19·78 24·74 27·45
1932 1933 1934	. 789 . 761 . 731 . 767 . 780	755 691 694 700 736	837 802 789 806 820				8·41 11·65 10·33 9·66 11·17	9·92 13·05 9·83 10·67 11·95	12·52 12·63 13·45 25·07 15·04
1936 1937 1938 1939 1940	. 798 . 826 . 861 . 897 . 900	795 832 868 888 892	839 859 888 906 936				14·07 18·92 13·08 8·34 14·92	9·83 17·90 15·52 11·95 15·61	21·89 25·09 20·72 16·71 21·94
1943 1944	. 905 . 1 046 . 1 003 . 993 . 1 002	893 893 893 892 892	988 1 075 1 102 1 098 1 102				16·42 16·76 19·51 22·71 20·69	21·43 14·64 19·84 19·05 24·07	21·76 21·58 25·07 24·96 24·71
1946 1947 1948 1949 1950	. 1 067 . 1 230	894 897 903 912 929	1 120 1 165 1 277 1 393 1 521	38·6 41·7	38·4 40·0	45·0 48·4	29·47 36·49 56·70 45·64 52·98	27·91 39·33 74·30 36·95 49·69	24·78 40·50 65·92 81·09 106·13
1951 1952 1953 1954 1955	. 2 380 . 2 444 . 2 525	949 1 055 1 155 1 174 1 247	1 833 2 159 2 246 2 277 2 354	48·2 62·5 68·7 71·2 72·9	42·5 47·6 55·9 61·5 63·2	54·6 66·8 73·1 74·7 75·6	53·76 60·63 61·77 53·35 49·05	51·54 71·74 71·12 44·84 59·97	237·28 118·54 137·74 138·18 120·66
1956 1957 1958 1959 1960	. 2 710 . 2 768 . 2 998	1 358 1 468 1 592 1 674	2 466 2 463 2 536 2 647	76·2 78·9 76·9 80·7 84·6	67·6 72·3 74·9 76·7 78·3	78·1 81·2 81·8 83·6 86·2	49·60 53·28 53·50 51·51 53·83	46·74 48·50 52·38 49·43 44·53	103·57 135·63 103·09 83·84 98·88
1961 1962 1963 1964 1965	•			90·9 87·7 86·6 88·8 93·9	83·2 85·9 86·7 88·7 92·1	89·8 89·5 89·1 90·2 93·9	55·37 55·70 53·94 52·65 51·88	40·39 49·43 48·94 49·12 50·84	88·49 91·69 98·92 119·53 97·31
1966 1967 1968 1969 1970	•	t calcula	ted	97·1 100·0 104·7 106·4 107·1	95·7 100·0 102·1 104·7 109·3	97·0 100·0 102·9 105·3 108·2	55·15 54·67 58·86 50·01 51·88	51·85 52·56 52·47 41·09 36·82	102·98 99·69 82·87 91·76 75·02
1971 1972 1973 1974 1975	•			109·5 113·6 123·1 148·3 163·7	115·9 124·4 133·3 150·6 185·3	112·5 119·2 126·5 143·9 169·7	52·98 55·26 56·09 103·20 108·82 p	49·21 40·96 59·30 87·59 106·37 p	59·74 72·21 178·07 176·54 120·12

<sup>(</sup>a) Base: Average all groups six capital cities 1923 to 1927 = 100.0.

<sup>(</sup>b) Base of each group 1966-67 = 100.0. Index numbers are for year ended 30 June in the year stated.

<sup>(</sup>c) Bulk wheat from 1962, previously bagged.

# METEOROLOGY, ADELAIDE

Year	Rain	fall	Evapor- ation	Sunshine		Temperature	
	Days of Rain	Total	Total	Total	Extreme Maximum	Extreme Minimum	Mean
	Days . 93 . 114	mm 456 683 786	mm	Hours	°C	°C	°C
856	110	633 611			42.8	1.7	17-4
001	. 116 . 137 . 110 . 135	511 591 341 458 366	1 345 1 548 1 422 1 421	2 588.0	43·1 44·1 45·7 41·0 44·7	2·9 3·0 0·3 1·8 2·0	17·7 17·8 16·9 16·7 17·1
901 906	. 113 . 121 . 124 . 127 . 127	356 385 457 674 407	1 322 1 337 1 494 1 400 1 223	2 752·7 2 643·9 2 522·6 2 366·4 2 415·0	39·3 44·0 43·3 45·1 39·3	2·3 1·3 1·8 2·3 1·6	16·8 17·4 17·5 17·6 17·2
931	142 100 116 145	715 575 564 565 491	1 411 1 478 1 473 1 517 1 525	2 511·9 2 658·0 2 688·6 2 534·5 2 430·8	41·9 43·1 40·1 45·9 39·8	3·5 2·8 3·0 3·1 2·8	16·7 18·2 17·3 16·8 17·1
942 943 944	126 133 135 114 105	573 646 453 435 453	1 604 1 674 1 595 1 633 1 523	2 471·8 2 422·2 2 416·7 2 333·7 2 431·2	43·3 44·7 44·6 39·7 41·7	3·3 3·4 2·7 0·3 1·1	16·9 17·3 16·4 16·8 16·7
946	135 145 122 119 91	574 556 544 463 408	1 385 1 573 1 622 1 492 1 657	2 301·0 2 311·3 2 401·7 2 317·7 2 677·5	41·3 40·7 43·4 38·0 40·0	2·0 3·3 2·9 2·6 3·6	16·3 16·9 16·3 15·8 17·0
0 = 1	135 128 121 109 134	646 508 508 425 624	1 645 1 523 1 712 1 680 1 677	2 338·7 2 459·2 2 584·7 2 502·6 2 396·1	40·5 40·8 41·3 39·4 42·8	2·6 1·6 3·9 3·4 3·6	16·9 15·8 16·6 16·7
957	154 110 121 88 129	692 424 446 288 586	1 638 1 736 1 672 1 750 1 606	2 378·6 2 672·5 2 454·7 2 591·9 2 355·6	38·3 40·9 39·0 43·3 41·8	4·1 3·4 1·2 3·1 2·4	16·4 16·8 16·4 17·3 16·3
963	122 125 118 135	379 456 621 556 339	n.a. n.a. 1 620 1 507 1 648	2 586·3 2 559·1 2 369·1 2 199·5 2 439·1	40·8 42·7 39·9 40·3 38·8	2·9 4·2 3·3 2·3 2·6	17·8 17·2 17·0 16·3 17·3
967	123 89 141 112 149	495 257 653 525 483	1 612 1 939 1 870 1 783 1 866	2 431·6 2 841·3 2 409·7 2 664·7 2 657·8	40·7 39·0 43·1 41·1 40·5	3·3 3·9 2·2 3·9 2·9	16·9 17·3 17·0 16·7 16·6
971	147 106 129 n.a.	672 446 675 639 522	1 813 1 947 1 740 1 561 1 635	2 624·4 2 966·8 2 686·4 2 584·3 2 596·2	39·6 39·6 40·5 36·9 41·2	4·2 2·3 3·7 3·6 3·8	17·1 17·3 17·7 17·2 17·4

# **RURAL PRODUCTION**

# **Land Cultivation**

	Year	Rural	Area of Rural	Area und	ler Crop	Area of Pastures	Area Under
	***	Holdings	Holdings	Fertilised	Total	Top- dressed	Irrigation
1841-42 1846-47 1851-52 1856-57 1861-62		No.	4 12		'000 hectar 3 14 33 82 162	res	
1866-67 1871-72 1876-77 1881-82 1886-87					245 339 497 873 925		
1891-92 1896-97 1901-02 1906-07 1911-12		27 120	47 012	335 629 1 010	780 830 905 873 1 200		
1916-17 1921-22 1926-27 1931-32 1936-37		29 278 29 693 29 654 30 648 31 321	52 475 54 311 54 867 52 354 55 433	1 156 1 197 1 430 1 705 1 619	1 468 1 367 1 572 2 112 1 853	66 56 366	9·1 14·3 17·3 17·1
1941-42		30 565	58 936	1 409	1 609	427	18·5
1942-43		27 934	58 859	1 062	1 391	382	<i>n.a.</i>
1943-44		27 826	58 488	789	1 117	285	<i>n.a.</i>
1944-45		27 867	55 639	926	1 287	293	<i>n.a.</i>
1945-46		27 635	57 670	1 228	1 548	346	17·1
1946-47		28 040	59 154	1 366	1 572	450	18·7
1947-48		27 597	57 624	1 367	1 559	563	17·2
1948-49		28 110	59 377	1 327	1 521	705	19·5
1949-50		27 900	59 312	1 263	1 464	725	19·9
1950-51		28 248	61 403	1 316	1 488	753	32·0
1951-52		28 698	61 425	1 284	1 496	870	23·6
1952-53		28 860	61 791	1 270	1 449	940	23·1
1953-54		29 220	60 830	1 350	1 529	1 144	25·1
1954-55		28 092	60 452	1 404	1 576	1 272	28·1
1955-56		28 585	60 689	1 378	1 607	1 416	28·7
1956-57		27 936	60 675	1 376	1 610	1 488	26·7
1957-58		27 971	61 530	1 401	1 581	1 621	32·9
1958-59		28 105	61 639	1 494	1 679	1 504	34·4
1959-60		28 527	62 903	1 489	1 643	1 405	40·8
1960-61		28 711	63 316	1 751	2 010	1 335	41·3
1961-62		28 886	63 494	1 644	1 825	1 450	43·9
1962-63		28 922	63 413	1 787	1 996	1 518	45·6
1963-64		28 711	64 307	1 938	2 177	1 616	47·7
1964-65		28 754	63 517	1 932	2 141	1 908	49·8
1965-66		28 759	64 505	1 971	2 142	2 061	52·1
1966-67		28 957	65 361	2 073	2 322	2 119	56·2
1967-68		29 058	65 059	2 037	2 270	2 076	70·1
1968-69		29 137	65 603	2 431	2 783	1 728	70·4
1969-70		29 035	65 839	2 138	2 407	2 008	75·3
1970-71		29 087	65 795	1 884	2 141	1 938	77·3
1971-72		29 095	65 146	2 113	2 478	1 822	76·1
1972-73		29 001	65 372	1 864	2 084	2 033	83·1
1973-74		28 738	64 843	2 146	2 451	2 425	80·2
1974-75		28 185	63 825	1 986	2 257	2 138	78·9

# RURAL PRODUCTION Crop Areas and Yields

			Cereals	for Grain			Hay		Vineyards
Year	W	neat	Ba	rley	0	ats	(a)	(b) (c)	(b)
	Area	Yield per Hectare	Area	Yield per Hectare	Area	Yield per Hectare	Агеа	Area	Area
	'000 hectares	Tonnes	'000 hectares	Tonnes	'000 hectares	Tonnes		'000 hectar	es
1841-42 1846-47 1851-52 1856-57 1861-62		1·40 1·34 0·85 1·68 0·74	1 2 3 4	1·12 1·68 0·92 1·19 0·89	1 1 1	1·12 0·90 0·98 0·90 0·91	9 25	0·4 0·7	0·1 0·3 1·6
1866-67 1871-72 1876-77 1881-82 1886-87(d)	186 280 439 716 797	0·96 0·39 0·36 0·31 0·37	5 7 4 5 7	1·13 0·53 0·60 0·64 0·73	2 2 1 1 3	1·00 0·49 0·48 0·48 0·56	45 40 37 135 128	0·9 1·1 1·3 1·8 n.a.	2.6 2.2 1.8 1.7 2.1
1891-92 1896-97 1901-02 1906-07 1911-12	628 685 706 683 887	0·28 0·11 0·31 0·70 0·62	5 6 6 11 17	0·52 0·42 0·88 0·98 0·97	5 16 14 23 44	0·29 0·21 0·61 0·70 0·56	123 137 150 121 211	3·6 4·8 6·6 7·4 9·4	5·0 7·4 8·4 9·1 9·7
1916-17 1921-22 1926-27 1931-32 1936-37	965 1 120	1·11 0·70 0·86 0·79 0·63	42 69 104 98 123	0·94 1·08 1·01 1·06 0·78	61 51 62 84 168	0·54 0·46 0·50 0·50 0·26	196 226 201 218 218	11.7 13.1 12.8 11.8 12.0	11.8 16.8 20.3 21.2 22.7
1941-42 1946-47 1947-48 1948-49 1949-50	961 835	0·88 0·75 0·92 0·85 1·01	194 203 228 282 281	1·37 0·94 1·53 0·97 1·03	118 102 125 116 106	0·58 0·49 0·78 0·41 0·59	226 133 120 95 119	12·0 11·4 11·5 12·0 10·9	23·5 23·6 23·8 24·2 24·4
1950-51 1951-52 1952-53 1953-54 1954-55	648	1·13 1·14 1·48 1·34 1·25	310 337 379 454 413	1·23 1·13 1·55 1·42 1·01	110 157 150 113 138	0·58 0·63 0·81 0·69 0·60	106 104 87 106 104	11.6 11.9 11.6 12.0 12.3	25·1 24·8 24·5 25·1 24·5
1955-56 1956-57 1957-58 1958-59 1959-60	651 582 539 570 627	1·21 1·47 0·75 1·53 0·52	422 494 490 539 522	1·32 1·56 0·81 1·58 0·52	172 173 173 195 205	0·77 0·87 0·36 1·12 0·22	132 121 118 170 99	13·4 13·8 14·3 15·1 15·1	24·2 23·2 23·2 23·0 23·0
1960-61 1961-62 1962-63 1963-64 1964-65	1 134	1·58 1·02 0·99 1·30 1·30	630 514 426 455 443	1·52 0·94 0·96 1·21 1·38	207 131 168 203 180	1·00 0·61 0·62 0·82 0·91	159 84 116 145 127	15·3 15·6 16·4 16·9 17·4	23·4 23·4 23·6 23·7 23·8
1965-66 1966-67 1967-68 1968-69 1969-70	1 517	0.98 1.22 0.63 1.49 1.24	444 448 468 572 560	0·94 1·20 0·60 1·17 1·23	184 206 212 209 150	0·55 0·91 0·28 1·03 0·80	121 195 174 249 155	17·8 17·9 18·3 18·0 18·1	23·8 23·1 23·5 24·5 26·2
1970-71	1 069 986 1 432	0.98 1.32 0.83 1.25 1.22	693 784 692 627 701	1·07 1·34 0·74 1·26 1·62	195 169 142 152 135	0·78 0·98 0·52 0·93 0·83	196 245 210 268 190	18·3 17·2 16·7 16·9 16·6	27·7 28·8 29·5 29·6 30·4

<sup>(</sup>a) Wheaten only to 1906-07, thence all kinds.
(b) Bearing and non-bearing.
(c) From 1949-50, private orchards and those no longer worked have been omitted.
(d) Statistics not collected and particulars estimated.

# RURAL PRODUCTION Livestock and Associated Produce; Farm Machinery

_	Lives	tock Nun	nbers	- Wool	Milk	Slaugh	terings	Fari	n Machii	nery
Year	Sheep -	Cat	tle	Production tion		Sheep and	Cattle and	Tractors	Shearing Ma-	Milking Ma-
	Sheep -	Total	Dairy Cows			Lambs	Calves	Tractors	chines	chines
1841-42	250 681 1 250 1 962 3 038	*000 21 57 100 273 265		'000 kg 5 791	1000	•	000		No.	
1866-67 1871-72 1876-77 1881-82 1886-87	3 912 4 412 6 133 6 804 6 542	124 143 219 294 285		8 954 11 752 19 253 22 118 22 934						
1891-92 1896-97 1901-02 1906-07 1911-12	7 646 6 324 5 012 6 625 6 172	399 337 225 326 394	80 84 75 98 122	26 133 23 558 20 209 22 193 27 372	127 077	1 276	87			
1916-17 1921-22 1926-27 1931-32 1936-37	5 091 6 257 7 284 6 609 7 905	289 419 340 265 328	114 166 127 128 170	17 025 26 202 32 824 30 400 34 747	136 174 188 199 183 817 227 309 289 581	686 1 208 1 091 1 379 1 697	62 95 143 81 166	1 820 3 992 4 563		420 380 409
1941-42 1942-43 1943-44 1944-45 1945-46	10 246 10 371 10 360 8 474 6 787	399 424 415 391 374	179 185 188 187 176	47 683 49 277 52 374 48 402 33 386	358 687 357 323 355 504 328 228 360 732	2 070 2 272 2 480 3 065 2 017	154 171 189 175 148	n.a. 6 705 7 064 8 044 9 211	n.a. 2 976 3 297 3 770 3 978	n.a. 1 659 1 963 2 206 2 349
1946-47 1947-48 1948-49 1949-50 1950-51	7 959 9 055 9 366 9 477 10 167	424 445 461 464 433	187 197 203 203 184	42 193 52 821 52 120 54 997 56 873	426 878 420 513 415 058 406 420 379 826	1 662 1 665 2 011 2 317 2 022	146 148 189 201 218	9 456 9 664 11 271 13 709 16 128	4 306 4 932 5 817 6 846 8 134	2 839 3 238 3 665 4 198 4 590
1951-52	11 470 12 037 11 838 12 817 13 585	437 483 491 524 566	176 183 192 199 195	61 454 71 966 66 002 70 652 78 788	393 237 382 781 386 418 412 330 410 739	1 547 2 353 2 637 2 799 2 358	216 187 220 233 227	18 184 19 750 20 842 23 110 24 345	9 054 9 733 10 302 11 452 12 134	4 909 5 418 5 876 6 363 6 920
1956-57 1957-58 1958-59 1959-60 1960-61	14 984 15 237 15 634 14 025 14 952	622 597 576 500 561	195 191 188 170 170	85 642 84 297 84 750 89 942 80 473	408 694 366 415 373 234 357 323 395 510	2 329 3 278 3 145 3 899 2 784	252 283 287 238 174	26 012 27 288 28 532 28 965 30 674	12 690 13 280 13 778 13 973 14 317	7 208 7 344 7 537 7 575 7 589
1961-62 1962-63 1963-64 1964-65 1965-66	16 415 15 737 16 402 17 289 17 993	659 679 694 697 690	183 190 185 182 176	94 050 95 481 97 856	434 152 433 697 433 244 465 065 447 325	3 140 3 467 2 996 3 100 3 474	201 254 279 275 277	31 788 31 671 33 231 34 164 33 998	14 532 14 595 14 885 15 172 15 386	7 707 7 553 7 438 7 328 7 040
1966-67 1967-68 1968-69 1969-70 1970-71	17 864 16 405 18 392 19 747 19 166	687 695 865 1 026 1 196	170 157 163 149 145	101 000 105 714 124 529	448 699 403 693 467 377 482 959 469 773	3 358 4 019 2 977 4 232 5 101	265 245 220 249 264	35 829 36 590 36 574 37 264 37 023	15 392 15 758 15 693 15 746 15 852	6 634 6 645 6 263 5 947 5 571
1971-72 1972-73 1973-74 1974-75	17 970 15 651 16 431 17 621	1 495 1 583 1 692 1 869	151 148 138 142	117 922 106 006 100 131 107 452	457 732 424 265 434 107 426 371	5 144 4 549 2 595 2 984	290 384 359 465	37 197 37 258 37 588 38 355	n.a. n.a. n.a. n.a.	n.a. n.a. n.a. n.a.

# MINING AND FACTORY PRODUCTION

		Min	Factories (a)			
Year	Princip	al Minerals P	roduced	Value of Production	Number of Establish-	Value
Ivai	Copper Ore and Concentrate	Coal	Iron Ore	(b)	ments	Added
846	Tonnes 6 565 7 841 11 980 11 440 23 661	'000 tonnes	'000 tonnes	\$'000 285 622 825 920 1 657		\$'000
871	26 948 28 597 25 871 18 713 16 894		7	1 347 1 205 842 554 551		
896	5 030 8 743 8 340 6 017 7 396		76 43 191	496 1 079 1 652 900 2 504	1 314 1 266	9 148 9 748
921	1 557 235 22 458 615		515 593 293 1 918 2 276	2 086 2 924 1 297 5 241 7 074	1 438 1 791 1 644 1 895 2 230	14 556 25 348 15 510 23 339 33 832
942	398 104 137 136	2 35 42 138	2 156 2 218 2 062 1 544 1 847	6 342 6 287 6 085 4 917 6 101	2 167 2 134 2 149 2 182 2 395	49 132 56 732 56 823 54 530 51 203
947	$-\frac{4}{3}$ $-\frac{3}{2}$	196 243 350 266 395	2 180 2 067 1 471 2 388 2 439	7 253 7 514 6 236 8 857 9 875	2 707 2 865 2 927 3 046 3 141	62 133 77 339 87 443 104 706 135 618
952	5 2 3 —	424 456 503 463 489	2 727 2 633 2 913 3 093 3 645	12 094 12 406 17 160 (c) 41 419 47 853	3 245 3 339 3 577 3 750 3 908	166 493 178 378 200 443 222 055 241 872
957	40 53 67 30 8	619 767 701 899 1 133	3 444 3 406 3 478 3 492 4 055	46 352 47 076 49 332 50 870 58 242	4 063 4 168 4 235 4 684 5 042	253 532 266 570 279 620 325 947 340 123
962	4 16 55 116 143	1 414 1 536 1 764 2 048 2 053	3 567 4 310 4 437 4 463 4 876	53 958 62 431 67 597 67 863 72 342	5 519 5 766 5 826 5 887 6 065	347 828 379 142 427 356 498 588 527 477
967	1 470 518	2 077 2 112	4 645 5 566	69 345 77 398	6 222 6 255	563 764 631 104
969	3 666 (f) 249 2 287 2 819	2 246 2 155 1 626 1 536	7 042 7 425 7 400 6 301	98 526 104 195 112 276 111 623	(d) 2 994 2 977 n.a. 2 979	(d) 643 079 714 579 n.a. 802 975
973	9 662 8 830 10 037	1 571 1 494 1 798	6 874 6 065 5 448	134 274 131 446 125 978	2 914 2 985 *	896 691 1 109 7 52 *

<sup>(</sup>a) Year ended 30 June. (b) Value at site of production. Quarries included from 1916. (c) Comparability affected by revaluation of iron ore. (d) For a description of the changes in definitions see page 490. (e) Year ended 30 June from 1970. (f) Metallic content from 1969-70.

# GROSS VALUE OF RURAL PRODUCTION

		Agric	ultural		Past	oral		Total Rural	
Year	Wheat	Barley	Vine and Orchard Fruit	Total	Wool (a)	Total	Dairying	Produc tion	
				\$'	000				
911-12	7 717	254	1 599	14 965	3 836	5 789	1 693	23 535	
916-17	21 729	599	1 653	27 677	4 274	11 200	2 759	42 909	
1921-22	12 577	1 227	3 491	23 221	5 752	8 296	3 678	37 273	
1925-26	17 979	1 656	3 352	28 307	8 591	12 930	4 171	47 629	
1926-27	19 052	1 685	4 082	30 181	8 937	12 140	3 895	48 357	
927-28	13 247	1 497	3 394	23 257	11 338	14 584	4 125	44 464	
928-29	12 845	1 737	3 909	23 880	9 308	12 472	3 810	42 373	
929-30	10 243	1 448	3 819	21 059	5 098	8 183	3 892	35 053	
930-31	8 091	893	3 241	15 708	3 608	5 801	3 121	26 333	
931-32	17 163	1 363	3 442	25 291	3 843	5 452	3 140	35 44	
932-33	13 097	1 371	3 463	20 921	4 619	5 834	3 654	32 03	
	10 933	1 280	3 618	19 533	9 013	10 608	3 108	34 77	
	10 318	1 553	3 882	19 965	5 309	7 706	3 091	32 48	
	13 135	1 457	3 953	22 863	8 116	10 885	3 797	39 12	
	14 955	1 766	4 191	26 044	8 720	12 315	4 310	44 36	
937-38	15 665	3 040	4 964	29 453	8 141	11 443	5 291	48 24	
938-39	8 580	2 046	4 056	20 008	7 802	12 327	5 171	39 61	
939-40	16 692	3 524	4 637	30 132	10 470	14 792	5 585	52 48	
940-41	8 379	2 321	4 873	20 167	10 532	14 757	6 079	43 13	
941-42	13 913	4 490	4 725	30 142	10 294	13 875	6 735	53 01	
1942-43	19 399	2 709	6 481	35 423	12 359	16 917	7 917	63 09	
1943-44	12 765	2 188	9 159	32 088	13 067	18 277	8 807	63 00	
1944-45	6 065	1 931	6 283	23 548	11 963	17 928	8 880	54 81	
1945-46	17 490	4 956	7 729	40 434	8 275	14 535	9 959	69 39	
1946-47	27 685	7 598	8 283	51 209	17 092	22 602	10 950	90 10	
1947-48	50 154	26 228	9 677	99 477	32 606	37 487	12 525	155 61	
1948-49	32 450	10 242	10 087	64 138	40 268	47 636	13 440	131 52	
1949-50	40 834	14 524	10 616	81 707	56 268	63 058	16 148	167 59	
1950-51	45 587	19 803	13 720	97 871	132 494	139 895	15 500	259 62	
1951-52	45 288	27 706	20 382	120 507	72 394	86 034	21 145	234 58	
1952-53	57 302	42 128	19 161	139 160	97 158	109 154	23 527	279 98	
	43 939	28 804	20 788	115 744	88 868	105 950	24 238	254 53	
	41 591	23 243	17 426	104 914	83 204	101 059	25 037	239 02	
	38 514	25 227	20 335	110 570	79 822	100 882	30 826	250 68	
	44 846	34 022	23 265	129 994	114 578	138 118	29 003	305 36	
1957-58	20 970	19 573	24 435	90 089	84 708	111 027	26 384	235 33	
1958-59	43 791	39 889	23 984	140 858	67 595	99 135	32 103	280 00	
1959-60	16 495	10 999	21 394	71 092	85 382	123 351	29 454	231 75	
1960-61	68 001	37 977	24 525	161 437	70 484	94 451	30 306	294 08	
1961-62	51 515	22 952	27 051	124 022	85 801	111 850	29 848	273 45	
1962-63	59 559	19 152	25 857	128 417	92 514	127 386	31 968	295 04	
1963-64		26 399	29 567	165 634	113 409	150 466	34 267	358 80	
1964-65		30 135	36 200	178 132	94 328	135 916	37 533	360 50	
1965-66		20 234	31 411	144 017	103 635	152 224	39 293	345 01	
1966-67		26 912	36 779	184 090	104 588	169 226	40 303	404 86	
1967-68 1968-69 1969-70 1970-71 1971-72	112 551 82 332 40 562	12 818 25 657 23 724 34 902 40 295	32 423 37 815 43 330 45 991 49 753	127 288 221 097 184 284 164 895 213 206	79 925 92 932 91 348 67 029 70 093	129 504 136 070 148 939 123 858 153 068	37 163 39 016 40 834 43 918 47 262	306 22 408 84 386 04 347 03 430 70	
1972-73	189 202	27 506	54 415	177 768	141 713	261 753	47 808	511 79	
1973-74		68 276	52 347	386 377	183 227	n.a.	n.a.	753 15	
1974-75p		119 525	69 308	428 253	125 044	n.a.	n.a.	n.a.	

<sup>(</sup>a) Shares of profits from sale of wool under war-time disposal schemes excluded.

# NET VALUE OF PRODUCTION

		Rı	ıral		- Other	Mining and
Year	Agricul- tural	Pastoral	Dairying	Total	Primary (a)	Quarrying (a)
			\$'0	000		
1925-26	19 374	11 497	2 988	34 648	1 537	2 684
	19 755	10 697	2 955	34 098	1 618	2 924
	13 661	12 861	3 146	30 858	1 784	3 254
	12 840	10 912	2 721	27 514	1 639	2 755
	10 521	6 795	2 988	21 189	1 685	3 270
1930-31	4 368	4 684	2 285	12 051	1 304	2 882
	16 681	4 450	2 435	24 259	1 357	1 297
	12 565	4 775	2 839	20 758	1 458	1 885
	11 820	9 122	2 278	23 768	1 445	2 456
	12 751	6 363	2 242	22 121	1 460	3 724
1935-36	14 673	9 205	2 786	27 242	1 489	4 739
	18 115	10 435	3 176	32 270	1 683	4 874
	18 320	9 713	3 782	32 510	1 758	4 941
	10 978	10 110	3 886	25 903	1 722	5 909
	19 482	12 413	4 388	37 412	1 931	6 887
1940-41	12 290	12 427	4 204	29 862	2 062	6 659
	19 314	11 559	4 276	36 181	2 495	6 595
	24 495	14 265	6 207	46 688	2 793	5 899
	22 086	15 577	6 991	47 063	2 961	5 949
	13 995	15 391	6 912	39 113	2 886	5 870
1945-46	29 935	12 396	7 652	52 640	3 417	4 756
	39 525	19 170	8 484	70 571	4 124	5 937
	83 901	33 861	9 970	131 832	4 858	7 037
	47 901	42 913	10 511	105 545	5 850	7 194
	65 579	57 116	13 637	140 976	5 814	5 882
1950-51	72 805	131 594	12 629	221 425	6 944	8 375
1951-52	93 807	77 929	17 714	193 792	8 862	9 292
1952-53	102 488	99 837	18 854	225 741	10 363	10 305
1953-54	83 399	94 847	20 514	203 296	11 598	10 075
1954-55	78 361	90 440	21 330	193 795	11 702	14 202
1955-56	82 542	89 249	26 547	202 430	12 151	(b) 37 302
	99 376	124 187	25 022	252 554	11 966	43 008
	64 635	89 726	15 651	173 506	10 287	41 249
	101 141	76 849	18 725	200 694	11 254	42 458
	48 492	100 135	18 281	170 450	10 694	44 311
1960-61	116 647	72 237	16 926	208 842	11 012	45 773
	90 933	91 256	19 826	204 484	10 911	52 623
	93 357	103 991	19 741	218 828	11 574	49 603
	125 180	125 979	21 195	274 720	12 279	57 836
	134 239	110 054	25 005	271 350	14 173	62 727
1965-66	105 657	123 757	25 127	256 934	15 817	62 727
	137 042	134 608	25 238	300 112	14 941	66 909
	90 903	98 722	22 169	214 300	15 482	63 492
	161 605	106 329	23 253	293 682	16 120	71 618
	131 082	117 337	28 188	281 217	18 614	n.a.
1970-71	119 749	94 717	31 097	251 448	19 888	n.a.
	158 796	123 412	32 163	319 185	22 821	n.a.
	131 119	223 308	33 822	393 891	24 057	n.a.
	320 596	n.a.	n.a.	615 107	28 098	n.a.
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

<sup>(</sup>a) To 1934-35, local value, i.e. gross value less marketing costs.

<sup>(</sup>b) Comparability affected by revaluation of iron ore.

TRADE
Overseas Exports

Year		Valı	e of Exp	oorts		Prop	ortion of T	Cotal Exp ountries o	orts Clas f Destin	sified ation
	Total	Wheat and Flour	Barley	Wool	Minerals (a)	Japan	New Zealand	UK	USA	Other Coun- tries
			\$'000					Per cent		
1861	6 311	76 146 578 2 146 1 846 420		1 302 1 518 1 948 2 884 3 496 3 508	362 1 030 744 658 488 1 126		3-42 4-62 4-00 1-96 0-71 0-69	89·46 81·48 89·62 89·58 82·03 86·90	2·44 n.a. 0·07 — 0·04	7·12 11·46 6·38 8·39 17·26 12·37
1891	8 111 8 866 13 742	2 728 222 2 232 4 780 7 671	2	3 776 3 038 2 208 3 360 4 007	3 714 3 878 3 252 3 574 6 195	0·01 1·38 0·07 — 0·04	0·29 0·48 0·65 0·26 0·17	80·82 56·39 51·62 51·68 45·96	0.90 0.28 0.10 0.24 0.13	17·98 41·47 47·56 47·82 53·70
1915-16	35 339 38 900 20 123	3 511 28 675 14 825 6 078 9 020	19 1 175 275 685 707	2 824 6 035 8 865 3 006 7 561	4 747 828 10 745 5 656 6 860	- 6·88 2·38 6·66	1·01 1·11 1·70 0·81 2·05	42·92 59·40 51·94 54·11 67·44	21·15 1·16 1·16 0·79 1·11	34·92 38·33 38·32 41·91 22·74
1940-41 1941-42 1942-43 1943-44 1944-45	. 18 847 . 31 170	8 617 3 863 4 085 10 504 13 175	226 338 122 410 115	6 656 11 596 6 843 8 509 8 376	2 606 6 220 2 084 2 313 5 589	5·29 1·01 —	3·46 3·39 10·61 9·18 6·30	50·46 32·02 45·27 40·36 42·34	15·48 34·14 15·12 8·61 13·18	25·31 29·44 29·00 41·85 38·18
1948-49		7 407 12 304 24 507 38 990 23 227	718 2 998 16 030 11 952 10 564	14 917 16 095 25 608 40 619 49 621	6 550 16 138 17 460 24 230 23 262	0·01  0·07 2·95	4·95 5·37 4·44 2·31 6·38	25·45 39·47 39·01 44·37 42·42	26·43 8·86 8·51 8·04 7·63	43·17 46·29 48·04 45·21 40·62
1951-52	. 215 348 . 194 501 . 245 897 . 220 498 . 190 158	36 852 42 155 36 062 30 518 24 075	14 662 18 035 30 975 24 465 15 794	109 900 65 806 87 135 78 817 69 195	29 893 42 995 56 007 54 059 50 620	5·90 4·60 8·17 6·35 5·05	2·39 7·26 3·32 5·80 6·59	39·58 39·36 45·12 41·66 40·78	14·41 14·65 12·93 10·57 11·57	37·72 34·13 30·46 35·62 36·01
1957-58 1958-59	. 195 332 . 245 848 . 199 764 . 181 831 . 181 652	26 266 32 558 24 868 23 656 19 028	14 069 18 535 17 183 20 404 12 251	70 063 98 924 73 082 63 208 74 830	53 972 63 707 50 249 38 682 38 085	6·71 13·62 11·23 13·25 12·91	7·47 7·40 7·85 7·86 4·30	38·70 31·73 31·50 34·81 32·08	10·71 13·09 9·32 8·50 7·91	36·41 34·16 40·10 35·58 42·80
1961-62 1962-63 1963-64	. 198 557 . 243 975 . 212 945 . 322 159 . 302 242	36 598 47 819 32 603 76 337 53 256	19 219 23 422 6 968 13 828 15 247	64 328 83 107 83 400 107 398 92 535	44 203 51 374 47 555 63 489 79 005	18·11 14·80 16·45 17·59 17·22	5·60 4·14 4·57 4·83 5·06	27·55 25·83 25·87 26·63 25·82	4·71 8·56 8·69 5·99 7·49	44·03 46·67 44·42 44·96 44·41
1967-68	. 296 276 . 325 170 . 282 767 . 300 934 . 417 030	45 864 55 675 31 432 27 421 59 457	7 050 13 056 2 321 11 683 16 133	94 486 98 013 77 008 84 747 81 797	76 896 76 855 88 579 92 806 119 292	18·38 20·43 21·81 25·52 19·02	5·89 4·69 5·05 4·55 5·58	22·81 15·46 18·20 16·46 17·03	10·37 8·85 11·03 9·78 9·41	42·55 50·57 43·91 43·69 48·96
1971-72 1972-73 1973-74	. 393 737 . 394 064 . 521 720 . 662 881 . 764 410	83 629 64 599 48 684 103 168 174 405	23 670 35 652 17 250 40 790 99 517	62 828 68 189 149 956 153 202 93 273	93 209 84 508 94 626 131 566 147 873	18·07 18·64 23·89 19·47 16·36	5-66 7-21 6-41 9-18 6-73	13·70 13·83 8·84 7·44 5·71	6·39 5·84 7·47 4·23 2·61	56·18 54·48 53·39 59·68 68·59

<sup>(</sup>a) Rocks, minerals and hydrocarbons, pig iron, pig lead, other lead and lead-base alloys, refined and unrefined silver.

TRADE
Overseas Imports; Retail Sales

	Value o	f Imports	Proportion Prin	n of Total I cipal Coun	mports Cla tries of Ori	ssified by gin	Value of Retail Sales of Goods		
Year	Total	Metals, Metal Manu- factures, and Machinery	Japan	UK	USA	Other	Total Excluding Motor Vehicles etc.	Motor Vehicles etc.	
	\$'	000		Per	cent		\$ mi	llion	
1861 1866 1871 1876 1881	2 756 4 193 2 891 6 428 7 133 5 003	310 570 342 1 084 1 022 770	0.01	80·14 89·69 81·85 81·30 79·06 78·90	0·32 1·80 1·45 1·44 3·80 6·82	19·54 8·51 16·70 17·26 17·14 14·27			
1891 1896 1901 1906	8 063 6 475 7 854 7 965 12 492	1 644 1 198 1 432 2 104 4 132	0·02 0·18 0·38 0·64 1·31	71·36 68·59 56·91 63·10 58·60	7·91 7·82 14·17 10·17 12·81	20·71 23·41 28·54 26·09 27·28			
1915-16	10 304 24 764 28 160 7 833 10 839	2 816 6 558 10 602 1 802 3 616	3·12 1·55 1·13 1·14 2·24	47.68 42.07 43.30 36.96 38.65	19·81 21·25 27·84 16·66 21·16	29·39 35·13 27·73 45·24 37·95			
1940-41 1941-42 1942-43 1943-44 1944-45	10 924 14 924 11 718 9 562 9 313	3 158 5 164 3 580 2 128 1 388	1·56 0·10 ——————————————————————————————————	38·09 28·11 20·56 24·97 24·49	12·01 12·36 14·44 33·53 19·91	48·34 59·43 65·00 41·50 55·60			
1945-46 1946-47 1947-48 1948-49 1949-50	17 556 23 875 45 908 60 914 91 509	3 622 6 788 12 740 21 678 44 334	0·03 	62·28 35·25 37·96 49·33 52·15	10·13 13·79 15·45 9·02 8·81	27·59 50·93 46·59 41·53 37·27			
1950-51	112 002 186 062 86 549 102 945 129 607	50 446 80 450 41 456 47 142 63 144	1·98 5·16 1·14 0·46 1·28	48·31 39·99 43·53 50·63 49·18	8·42 9·37 11·71 8·93 13·28	41·29 45·48 43·62 39·98 36·26	271·7 294·4 324·4	84·3 97·6 113·4	
1955-56	125 504 90 813 94 205 90 693 119 493	64 656 40 536 40 792 40 534 57 962	3·18 1·39 1·85 2·56 2·69	49·17 44·01 46·37 42·08 43·89	11·70 12·26 11·91 11·50 12·15	35.95 42.34 39.87 43.86 41.27	347·8 362·3 367·2 387·2 436·6	123·6 124·7 125·4 138·0 160·2	
1960-61 1961-62 1962-63 1963-64 1964-65	142 764 103 386 139 826 179 651 204 856	72 570 46 774 71 820 94 302 108 243	5·37 3·28 4·08 4·72 8·01	32·66 31·95 31·83 24·75 23·72	17·61 21·87 22·92 30·63 29·11	44·36 42·90 41·17 39·90 39·16	448-9 451-6 479-9 525-3 574-5	156·1 143·1 180·5 212·5 238·0	
1965-66 1966-67 1967-68 1968-69 1969-70	198 156 196 771 215 619 231 956 201 223	103 032 97 861 113 215 134 222 98 204	6·84 7·69 7·16 11·19 10·77	23·32 21·64 17·29 19·82 21·49	27·25 27·72 32·71 27·35 21·50	42·59 42·95 42·84 41·64 46·23	602·0 627·1 663·6 706·9 762·3	220·4 214·7 242·0 261·1 285·7	
1970-71 1971-72 1972-73 1973-74 1974-75	189 748 199 978 313 915	98 358 83 083 88 271 99 861 136 079	14·44 15·08 20·48 22·57 19·17	25·10 22·83 17·49 12·03 14·20	17-32 14-48 15-08 16-91 13-10	43·14 47·61 46·95 48·49 53·52	818·8 956·9 1 047·4 1 226·6 p1 456·6	297-6 322-5 n.a. 457-9 n.a.	

# TRANSPORT AND COMMUNICATION

# **Public Transport**

Year -			Railways		Buses and	Buses and Trams (a)		
	Year	Passengers Carried	Goods Carried	Revenue	Passengers Carried	Revenue	(Entering SA) (b)	
		'000	'000 tonnes	\$'000	'000	\$'000	'000 net tonnes	
1841							18	
1846 1851		• •					25 75	
1856		248	32	44			114	
1861		310	145	185			103	
1866 1871		425	171 228	236 235			169 187	
1876		1 400	387	402			347	
1880-81		2 902	683	837			641	
1885-86		3 962	779	1 098			771	
1890-91 1895-96		5 296 5 436	1 427 1 057	2 448 1 973			1 288 1 661	
1900-01		8 864	1 628	2 473 2 700			1 967	
1905-06		10 715	1 732	2 700	24.012	480	2 785 3 625	
1910-11 1915-16		16 620	2 731 2 397	4 030 3 931	34 013 43 372	649	2 566	
1920-21		23 788	2 682	5 884	55 324	1 111	2 887	
1925-26		25 752	3 563	8 524	66 207	1 322	4 526	
1930-31 1935-36		15 453	2 175 2 482	5 201 5 781	52 756 50 625	1 444 1 347	4 166 5 318	
1940-41		20 360	2 770	7 060	56 518	1 537	3 047	
1945-46		23 119	2 997	9 794	90 239	2 469	1 733	
1950-51		17 178		(c)14 715	78 141	3 238	5 283	
1951-52 1952-53		18 269	4 966 4 172	19 022 24 976	75 436 66 571	3 684 (d) 4 232	5 529 5 900	
1953-54		17 605	4 457	25 848	66 972	4 145	6 108	
1954-55		16 849	4 497	26 522	66 446	4 267	6 123	
1955-56		16 434	4 436	26 662	63 515 62 190	4 668	6 282	
1956-57 1957-58		17 406	4 518 4 166	28 132 27 033	60 083	4 578 4 988	6 360 6 569	
958-59		16 805	4 227	26 179	59 613	5 056	6 744	
1959-60		17 038	4 059	25 652	58 168	5 641	6 745	
1960-61 1961-62		15 574	4 537 4 638	27 883 27 984	58 912 57 950	5 515 5 430	7 613 7 646	
1962-63		14 922	4 530	27 826	58 039	5 436	7 886	
1963-64		15 227	5 213	29 673	58 571	5 473	9 486	
1964-65		15 196	5 131	29 960	56 434	5 899	9 697	
1965-66 1966-67		15 511	4 823 4 909	29 137 30 417	53 112 49 735	6 049 6 270	9 517 10 220	
1966-67 1967-68		15 432	4 401	28 244	49 /33 47 813	6 2 2 5	10 220	
1968-69		14 423	5 037	30 522	45 393	6 472	10 345	
1969-70		13 990	5 922	33 566	43 345	6 696	12 213	
1970-71		13 946	6 025	34 635	41 259	6 881	11 303	
1971-72 1972-73		13 433	5 948 5 820	35 603 35 332	40 842 41 680	6 978 7 304	10 533 9 957	
1972-73		13 597	6 655	33 332 39 827	(e)47 533	(e)9 958	9 639	
1974-75		12 697	6 783	48 315	58 298	13 427	9 742	

<sup>(</sup>a) Buses and trams operated by Bus and Tram Division of the State Transport Authority. Years ended 31 July from 1912 to 1939. 31 January from 1940 to 1952, and 30 June from 1953.

<sup>(</sup>b) Years ended 31 December to 1913; thereafter year ended 30 June.

<sup>(</sup>c) Excludes Treasury grant from 1949-50. (d) Excludes Government grant from 1952-53.

<sup>(</sup>e) From March 1974 includes details of licensed private services taken over by the Division.

# TRANSPORT AND COMMUNICATION

		Motor V	ehicles on	Register	Drivers and	Tele- phone	Radio	Pos	t Office R	evenue
Ye	ear	Cars and Station Wagons	Utilities, Vans, Trucks, Buses	Total (incl. Cycles, Scooters)	Riders	Services in Opera- tion (a)	Licences	Postal, Etc. (c)	Tele- graph (c)	Tele- phone
			'000			Number			\$'000	
1851 1856 1861 1866								14 18 33 56	15 24	
1871 1876 1881 1886 1891								58 114 166 214 227	22 64 123 160 201	
1896 1901 1906 1911 1916		•				1 831 2 510 6 086 10 184		250 282 342 490 484	242 263 182 233 277	61 93 212
1921 1926 1931 1936 1941		(d) 45·1 53·7	8·2 (d) 12·1 19·4 24·4	21·4 62·5 (d) 67·3 84·3 86·2	79 659 106 053 92 227 122 280	15 984 33 547 39 552 39 911 47 962	12 105 32 075 93 881 136 457	762 867 879 1 017 1 252	420 402 282 327 458	468 903 1 168 1 197 1 522
1946 1947 1948 1949 1950		75·7 84·3	31·4 34·7 36·4 40·7 46·0	107·2 115·2 127·5 143·5 163·9	137 979 149 304 159 814 172 063 192 469	53 126 56 449 60 249 64 008 69 907	164 497 180 371 196 336 211 436 226 723	1 921 1 989 2 190 2 345 2 546	815 875 946 848 1 169	2 170 2 345 2 507 2 761 3 536
1951 1952 1953 1954 1955		120·5 129·7 139·7	51·2 55·9 61·2 64·6 70·2	183·6 200·4 214·3 226·9 244·4	215 157 232 119 252 216 265 727 281 091	74 457 80 919(e 86 977 93 104 100 171	243 019 )207 527 210 808 218 745 221 118	2 938 3 872 4 086 4 311 4 670	1 550 1 818 1 191 1 112 1 028	4 271 5 588 6 070 6 728 7 266
1956 1957 1958 1959 1960		171.9 184.3 200.3	73·2 75·7 77·8 81·0 84·1	257·5 269·3 283·0 301·5 318·3	299 158 315 044 328 833 340 973 369 584	107 649 114 390 122 311 131 060 138 019	228 625 234 120 238 916 247 468 249 148	5 033 5 579 5 877 6 247 7 359	1 075 1 358 1 385 1 421 1 487	8 067 8 993 9 950 10 524 12 793
1961 1962 1963 1964 1965		238·9 258·8 280·1	82·5 82·5 83·9 86·3 86·4	325·2 338·1 358·2 380·5 397·4	393 869 397 803 414 656 427 717 447 985	144 502 152 785 162 012 173 314 182 249( <i>f</i>	249 475 249 673 256 741 266 027 7) 269 040	7 729 7 761 8 322 8 709 9 312	1 643 1 434 1 592 1 852 2 187	14 544 15 604 16 508 19 181 23 038
1966 1967 1968 1969 1970		327· <b>7</b> 342·9 364· <b>7</b>	87·3 87·1 87·6 89·6 90·7	413·5 427·6 443·9 468·2 490·1	464 778 481 496 491 765 513 687 535 184	192 922 203 191 212 842 224 174 239 452	281 747 278 069 290 051 297 877 302 519	9 759 10 117 11 378 (g)13 211 13 885	2 398 2 521 2 688 (g)1 606 1 918	24 757 26 990 30 124 (g)34 523 38 465
1971 1972 1973 1974 1975		420·4 445·4 468·6	91·5 92·8 97·8 100·6 104·0	510·3 536·0 572·4 601·2 628·9	550 745 570 562 592 481 612 693 637 248	251 330 261 608 278 687 298 300 311 804	310 485 315 612 332 411 339 516 (h)	15 847 18 309 19 227 21 298 25 128	1 988 2 342 2 569 2 963 3 581	43 333 50 820 58 306 68 208 83 406

<sup>(</sup>a) At 30 June from 1916; at 31 December in earlier years. (b) At 31 December from 1931 to 1943; otherwise at 30 June in years shown. (c) Years ended 30 June from 1886; earlier years ended 31 December. Telegraph includes telephone to 1901 and radio to 1948, from which time radio etc., licence fees have been excluded from Post Office revenue. (d) Vehicles in actual use on roads from 1930. (e) All receivers at the one address covered by one licence from 1952. (f) Combined radio and television licences included since 1 April 1965. (g) From 1968-69 content not comparable with previous years. (h) Abolished from 17 September 1974.

# PUBLIC FINANCE

		State	Govern	nent			Local Government Revenue			
Year	Total	Expen	diture	Public	Debt	State Taxation (a)	From Rates	Govern- ment	Total	
	Revenue	From Revenue	From Loan (Net)	Total	Per Head	• •	11	Grants		
	\$'000	\$'000	\$'000	\$'000	\$	\$'000	\$'000	\$'000	\$'000	
1850-51 1855-56	. 51 . 95 . 445 . 960 . 1117	180 77 367 1 160 966		590 1 733	5·50 13·30	202 326 282	46	54 40	114 114	
1870-71 1875-76 1880-81	. 1 900 . 1 556 . 2 640 . 4 344 . 4 558	2 130 1 519 2 647 4 108 4 767	2 800	1 551 4 335 7 674 22 394 36 680	9·20 23·00 34·20 78·30 118·60	478 498 920 1 168 1 603	60 80 118 188 208	60 74 80 136 108	162 194 286 488 502	
1900-01 1905-06	5 464 5 043 5 648 5 612 8 363	5 207 5 019 5 693 5 437 7 929	968 886 845 900 3 752	43 315 48 433 52 129 60 165 (b)56 065	135·80 137·60 146·40 165·80 136·50	1 655 1 600 1 203 735 1 092	276 264 302 348 481	254 194 222 198 336	702 652 738 746 1 004	
1920-21 1925-26 1930-31 1935-36	8 714 14 303 20 948 21 452 22 819 25 849	9 483 15 087 20 922 25 079 22 521 26 015	4 371 9 351 12 860 6 581 2 502 2 548	79 049 104 725 160 521 199 055 211 397 219 599	179·40 210·70 290·10 345·70 359·70 365·30	1 403 3 244 5 428 6 800 6 409 8 683	652 986 1 640 1 672 1 665 1 851	302 580 942 397 509 577	1 150 1 930 3 44 2 613 2 824 3 170	
946-47 947-48 1948-49	32 687 34 385 37 686 43 690 58 721	32 687 34 506 38 312 44 259 59 100	3 419 4 423 4 963 9 281 17 339	221 498 228 260 237 704 249 440 266 349	348·80 353·20 359·50 367·20 375·40	(c) 4 036 4 286 4 573 5 740 6 591	2 040 2 271 2 610 2 967 3 248	451 697 923 1 106 1 496	3 47 4 06 4 74 5 51 6 38	
951-52 952-53 953-54	67 344 85 276 98 203 104 751 103 768	66 885 85 098 98 153 101 132 108 236	33 871 52 875 40 885 39 879 42 912	296 776 346 872 389 706 429 446 472 925	405·20 459·40 502·30 538·80 577·10	8 104 9 586 9 983 13 073 15 092	3 830 4 686 5 761 6 524 7 041	1 963 2 578 2 306 3 867 3 836	7 57 9 54 10 80 13 41 14 21	
1956-57 1957-58 1958-59	118 805 131 522 141 285 145 360 160 555	121 665 131 619 142 083 147 414 161 177	42 666 43 793 37 153 41 442 43 432	512 179 552 880 593 628 635 404 678 210	603·60 633·20 662·00 690·00 717·50	16 150 18 620 19 541 20 435 22 297	8 162 9 563 10 333 11 060 11 971	4 381 4 733 4 848 4 948 5 478	16 31 18 43 19 72 21 08 22 53	
1961-62 1962-63 1963-64	172 559 186 405 195 168 211 006 222 181	170 182 185 392 194 589 207 755 224 803	44 739 43 773 42 047 44 218 53 100	722 038 763 399 807 044 853 553 902 823	743·20 773·10 798·50 822·30 845·70	23 425 25 150 26 940 29 825 34 901	13 076 14 887 15 943 16 968 18 625	(d)3 524 2 984 3 215 4 317 3 804	25 03 27 96 29 09 33 72 33 95	
966-67 1967-68 1968-69	236 816 258 823 274 544 298 355 338 498	243 650 258 717 277 404 297 895 335 578	61 390	955 128 1 013 060 1 074 959 1 143 954 1 210 489	872·30 913·00 958·30 1 004·10 1 045·30	37 636 44 708 48 255 53 351 59 840	20 412 22 875 24 369 26 276 27 596	4 106 4 244 4 493 4 505 4 988	38 02 42 31 42 81 45 26 48 55	
1971-72 . 1972-73 1973-74	386 859 455 245 520 866 641 967 828 985	386 838 456 312 524 777 645 368 820 601	111 740 117 411 107 566		1 070·40 1 124·10 1 180·20 1 218·20 1 259·40	62 745 97 476 120 474 156 903 214 982	29 118 32 224 35 874 42 203	4 758 7 653 15 025 12 056 21 219	49 58 54 88 65 91 67 68	

<sup>(</sup>a) Excludes all taxation paid to Special Funds. From 1966-67 the coverage of this item does not completely coincide with SA Treasury classifications. (b) Debt of Northern Territory and Port Augusta-Oodnadatta railway transferred to Australian Government. (c) Uniform taxation in force from 1941-42. (d) Excludes reimbursement for work done on behalf of Highways Department from 1961.

## PRIVATE FINANCE

-		Banking		Life In	surance	Communi	C		
Year	Trading Advances (a)	Banks Deposits	Savings Bank Deposits at 30 June	New Policies Issued Sum Assured	Policies in Existence Sum Assured	General Insurance Revenue (b)	Co-op- e erative Societies (b)		Building Societies (b)
			S'	000			No	of Mem	bers
1846 1851 1856 1861	. 2 864 . 6 240	183 426 1 419 1 480 2 803	29 106 243 499						
1871 1876 1881 1886 1891	. 13 483	3 043 6 632 9 885 9 924 15 <b>5</b> 50	982 1 703 2 499 3 306 4 316						
1896 1901 1906 1911 1916	. 10 612 . 16 970	15 343 13 437 15 598 22 257 27 264	5 673 7 591 9 534 14 872 20 070				10 248 13 270	65 540	9 572 8 962
1921 1926 1931 1936 1941	. 31 672 . 44 119 . 43 760	44 199 51 574 44 956 52 399 64 182	32 635 43 558 42 844 50 617 55 019	6 000 9 341 6 266 10 791 11 416	40 272 60 244 65 016 75 984 101 825	1 305 2 045 1 627 1 859 2 643	28 762 41 539 45 791 45 592 n.a.	70 155 77 791 (c) 71 658 76 357	10 621 17 011 14 081 9 257 n.a.
1946 1947 1948 1949 1950	. 39 674 . 39 585 . 41 387	93 397 99 653 119 859 142 558 159 136	131 729 135 800 147 226 162 351 175 390	22 805 24 935 26 555 29 003 33 076	147 230 165 025 183 753 204 289 227 616	2 705 3 372 4 371 5 755 7 312	70 620 80 150 84 470 87 733 92 066	80 419 79 827 78 246 76 761 75 168	18 665 19 774 20 815 22 017 22 646
1951 1952 1953 1954 1955	. 89 163 . 79 574 . 95 968	206 743 214 630 247 260 250 802 250 795	195 698 207 452 227 750 245 898 263 384	44 899 48 475 51 671 59 540 70 458	261 931 298 494 335 457 377 093 426 881	9 298 12 370 14 593 16 165 18 321	92 424 96 134 100 323 107 069 109 667	71 591 67 563 63 922 61 345 59 149	22 782 23 016 23 801 23 814 24 397
1956 1957 1958 1959	. 105 618 . 125 971 . 124 924	241 044 266 897 262 700 272 599 265 498	271 512 284 802 297 716 314 304 331 996	75 301 89 470 94 137 111 440 131 951	477 554 539 120 599 723 676 406 756 581	20 590 23 835 24 656 26 223 27 975	114 018 109 636 (d) 112 844 116 645	57 216 55 499 54 181 53 114 52 239	24 266 (d) 24 321 24 665 24 847
1961	. 147 348	269 848	333 485	143 628	841 563	32 363	111 031	51 551	24 835
1962 1963 1964 1965	. 175 753 . 193 251	277 431 285 418 311 208 347 045	361 980 416 155 475 803 519 268	197 790	955 426 1 056 390 1 161 986 1 294 450	33 740 37 499 41 695 45 433	116 405 108 283 113 224 115 828	51 198 50 765 50 946 51 258	21 854 21 260 22 348 22 746
1966 1967 1968 1969	. 284 271 . 321 892 . 354 782	362 905 372 985 390 110 405 666 424 017	558 857 605 167 643 690 691 778 733 100	279 996 301 602	1 439 083 1 618 112 1 807 040 2 031 479 2 313 244	50 121 ( 56 114 59 981 65 354 70 640	e)116 615 125 638 125 385 126 529 123 263	51 109 51 001 51 070 50 880 50 796	23 611 23 722 22 458 26 373 33 863
1971 1972 1973 1974 1975	. 419 682 . 470 070 . 585 505	749 182	787 901 874 138 1 060 425 1 174 813 1 394 585	586 663 72 <b>7</b> 998	2 667 651 3 053 169 3 565 754 4 175 174 * (f	76 020 89 173 98 678 127 473 1) 178 363	124 021 123 755 121 893 122 562 122 701	50 488 50 077 50 664 50 779 49 888	41 670 49 804 66 853 99 043 131 049

<sup>(</sup>a) Until 1961, average of balances at close of business on Wednesdays during the June quarter of the year stated. From 1962, average of balances at close of business on Wednesdays during the year ended 30 June of the year stated. (b) Year ended 30 June. (c) Membership at 30 June from 1932; previously 31 December. (d) Balance dates of societies do not coincide; from this year figures are laggregates of members at balance dates within the year ended 30 June. (e) Figures from 1966 have been revised because of a redefinition of Co-operative Societies, and details for years before 1966 are not comparable. (f) Premium income only; details of interest, dividends and rent no longer available.

APPENDIX B

# PRINCIPAL EVENTS

# CHRONOLOGICAL LIST OF IMPORTANT EVENTS IN SOUTH AUSTRALIA SINCE 1836

- 1836—First migrants landed at Kangaroo Island on 20 July. First South Australian newspaper published in London. Colony's first school opened on Kangaroo Island. The Surveyor-General, Col Light, arrived in November and commenced survey of Adelaide. Governor Hindmarsh arrived in HMS Buffalo and proclaimed South Australia a Province on 28 December.
- 1837—Col Light completed survey of Adelaide and designed the city's present layout. First Adelaide land allotments made. First newspaper published in South Australia. South Australian Supreme Court established. First hospital opened in North Terrace, Adelaide.
- 1838—First overland cattle and sheep drives from New South Wales. First export from South Australia, a small clip of wool, dispatched. First German settlers under the leadership of Pastor Kavel arrived in South Australia. Formation of first police force.
- 1839—Col Light died at Thebarton and buried in Light Square. First road in South Australia built between Adelaide and Port Adelaide. Adelaide Chamber of Commerce founded.
- 1840—Eyre started overland journey to Western Australia. The Municipality of Adelaide incorporated, the first in Australia. McLaren Wharf, Port Adelaide, opened by Governor Gawler.

- 1841—First South Australian mine (silver-lead) opened near Glen Osmond.

  Assisted migration suspended because of depression. Following financial crisis Governor Gawler recalled and succeeded by Governor Grey.

  Eyre arrived at Albany in Western Australia.
- 1842—Registration of births, deaths and marriages commenced. Portions of South Australia divided for first time into counties. Copper discovered at Kapunda. Legislative Council constituted. The South Australian Board of Colonisation Commissioners abolished by the British Government.
- 1843—Stripper invented by Ridley. A flour mill built at Hindmarsh.
- 1844—First Colonial Census held, and showed a population of 17 366.
- 1845—Copper discovered at Burra. Sturt explored the north-eastern part of the State. Gold found in South Australia, near Montacute. Assisted migration resumed.
- 1846—First pastoral leases granted.
- 1847—First winery in the Barossa Valley commenced operation. St Peters College established.
- 1848—Opening of The Savings Bank of South Australia. First ferry across the River Murray commenced operations at Wellington.
- 1849—The Central Board of Main Roads established.
- 1850—An Act granting representative government to South Australia passed by the British Parliament.
- 1851—The Central Board of Education established.
- 1852—First overland gold escort arrived in Adelaide.
- 1853—W. R. Randell's Mary Ann and Francis Cadell's Lady Augusta initiated the navigation of the Murray.
- 1854—State's first railway (horse-drawn) built from Goolwa to Port Elliot.
- 1855—First South Australian postage stamps issued.
- 1856—First telegraph line opened from Adelaide to Port Adelaide. The new Constitution Act embodying the principle of responsible government proclaimed; it provided for Parliament to consist of two Houses; a Legislative Council and a House of Assembly. First steam railway from Adelaide to Port Adelaide constructed. Population of the State passed 100 000.
- 1857—Railway to Smithfield and Gawler opened.
- 1858—The Real Property Act, which embodied the principles of conveyancing formulated by Torrens, came into operation. First telegraph line to Melbourne opened.

- 1859—A jetty over 350 metres in length constructed at Glenelg. Copper discovered at Wallaroo.
- 1860—Water supplied to the City of Adelaide by means of a main connected with the reservoir at Thorndon Park.
- 1861—Copper discovered at Moonta. Water laid on to houses in Adelaide.

  John McDouall Stuart set out to cross the continent from south to north.

  The South Australian boundary shifted west to coincide with the boundary of Western Australia.
- 1862—Stuart reached Chambers Bay on the coast of the Northern Territory.
- 1863—Administration of the Northern Territory taken over by South Australia.

  Shops of Adelaide lit for the first time with gas.
- 1865—Annual leases of pastoral lands sold by auction for first time. The Bank of Adelaide founded.
- 1866—Camels for the purpose of exploration introduced by Sir Thomas Elder.

  The Adelaide Town Hall opened.
- 1867—Visit of Alfred, Duke of Edinburgh, who laid the foundation stone of the General Post Office.
- 1869—Foundation stone of St Peters Cathedral laid. Prince Alfred College opened. Adelaide Chamber of Manufactures founded.
- 1870—Construction of the transcontinental telegraph from Port Darwin commenced. John Forrest and party made first of two journeys of exploration from Perth.
- 1872—Transcontinental telegraph from Port Darwin completed and first direct telegram from London received.
- 1873—Eight-hour working day adopted. First Health Act, establishing a Central Board of Health, passed.
- 1874—The University of Adelaide founded.
- 1875—The State Education Act passed. First Forestry Board established.
- 1876—Telegraph communication with New Zealand established. The Smith brothers invented the 'stump jump' plough. South Australia became first State to give legal recognition to trade unions.
- 1877—Overland telegraph line from Port Augusta to Eucla completed and first telegram from Perth transmitted. The Adelaide Bridge completed.
- 1878—Provisions of the Education Act relating to compulsory school attendance brought into force in the Adelaide school district. First tramway (horse-drawn) in any Australian city commenced carrying passengers to Kensington and North Adelaide. The State's population passed 250 000.

- 1879—Foundation stone of the Adelaide University laid. First bridge across River Murray in South Australia opened at Murray Bridge.
- 1881—First reclamation of swamp areas of River Murray. Art Gallery opened by His Royal Highness Prince Albert Victor. Construction of the weir which created the Torrens Lake completed.
- 1882—Fire Brigades Board established.
- 1883—The Telephone Exchange commenced operations. Roseworthy Agricultural College opened to students.
- 1884—Largs Bay Fort opened. Adelaide Trades and Labor Council, the first delegates society, inaugurated.
- 1885—Broken Hill silver mines opened. Column erected on Mount Lofty summit as a prominent landmark for mariners.
- 1887—Act authorising payment to members of Parliament passed. Renmark Irrigation Colony established. First express trains ran between Adelaide and Melbourne. The Jubilee Exhibition opened. Stock Exchange of Adelaide formed by amalgamation of Adelaide Stock Exchange and Stock Exchange of South Australia.
- 1888-Totalisator legally authorised by an Act of Parliament.
- 1889--The School of Mines and Industries opened. Smelting of silver-lead ore from Broken Hill commenced at Port Pirie.
- 1890—First South Australian built locomotive completed.
- 1892—Education made free to the compulsory age, and standard.
- 1894—Act granting the franchise to women passed. Inauguration of industrial arbitration by the establishment of Boards of Conciliation.
- 1896—State Bank of South Australia opened. Women voted for the first time at the general election. Happy Valley Reservoir opened. One of Adelaide's most severe droughts commenced, and continued for several years.
- 1899—Second referendum concerning the establishment of Federation held. In South Australia, 65 990 electors voted for Federation and 17 053 against. First military contingent left South Australia for the Boer War.
- 1900—Adelaide lit for the first time with electric light. The Commonwealth of Australia Constitution Act received Royal Assent and a Proclamation was issued uniting the States as the Commonwealth of Australia as from 1 January 1901. Conservatorium of Music opened. First Workmen's Compensation Act passed.
- 1901—Early closing of shops introduced. First Australian Parliament elected.

  The Duke and Duchess of York arrived in the *Ophir*. The *Customs Act* came into force. The Electric Light Works was opened. Iron Knob connected to Whyalla by railway.

- 1902—Flinders column, at Mount Lofty, dedicated to the public by the Governor, Lord Tennyson.
- 1905—First kindergarten in South Australia opened.
- 1906-Military cadet system inaugurated.
- 1907—High schools were established in a number of country centres. Municipal Tramways Trust incorporated. First Federal basic wage judgment—the 'Harvester' award—made.
- 1908—Penny savings bank accounts for children established. The Outer Harbor opened. Adelaide High School established.
- 1909—Adelaide electric tramways commenced operations. Payment of age pensions by the Australian Government commenced.
- 1910—Payment of invalid pensions by the Australian Government commenced.

  First recorded monoplane flight in Australia made by F. C. Custance at Bolivar.
- 1911—'Penny Postage' to all parts of the British Empire introduced. The Federal Defence Act came into operation. Administration of the Northern Territory transferred to the Australian Government.
- 1913—Medical inspection of school children introduced. Commonwealth Bank formally opened. Metropolitan Abattoirs established.
- 1914—First South Australian military expeditionary force embarked at Outer Harbor. South Australia experienced its most severe drought.
- 1915—Prices of commodities fixed by a commission. A referendum approved the closing of liquor bars at 6 p.m. Women appointed as justices of the peace for the first time. First shipment of iron ore made from Whyalla to steelworks in Newcastle. First women police appointed. Opal discovered at Coober Pedy.
- 1916—Referendum proposing compulsory military service abroad defeated. First Public Service Commissioner appointed. First State living wage with general application declared.
- 1917—German private schools in South Australia were closed. East-West transcontinental railway completed and the first train ran to Perth. Mr R. G. Carey, in a Bleriot 60, made the State's first airmail flight from Enfield to Gawler.
- 1919—Captain Butler flew from Adelaide across Gulf St Vincent carrying air mail to Minlaton. Soldier Settlement Bill passed by the South Australian Parliament. First Lord Mayor of Adelaide elected.
- 1920—Sir Ross Smith and party arrived at Adelaide by non-stop flight from Melbourne. Peace Exhibition held at the Jubilee Exhibition buildings. The Prince of Wales visited South Australia.

- 1921—The State's population passed 500 000.
- 1922—First lock on the River Murray completed and opened at Blanchetown.
- 1923—The Government approved an extensive re-organisation of the railway system.
- 1924—Public Debt Commissioners were appointed. Air mail between Adelaide and Sydney inaugurated. Waite Agricultural Research Institute established. First radio stations commenced broadcasting.
- 1925—Showgrounds at Wayville opened. The first Federal election at which voting was compulsory took place. Foundation stone of Adelaide Teachers Training College laid.
- 1926—The South Australian barley exhibit won all prizes at the Brewers Exhibition in London. The State Bank opened for general banking business.

  Construction of a narrow gauge railway from Oodnadatta to Alice Springs approved. State petrol tax declared invalid following an Australian Government writ against the State.
- 1927—Extension of the North-South railway commenced. The first train arrived at Renmark following the opening of the Paringa Bridge. The Duke and Duchess of York arrived in South Australia.
- 1929—The first air mail left Adelaide for Perth. The first train to Alice Springs left Adelaide. Compulsory military training abolished and replaced by a voluntary system. Electric tram service to Glenelg commenced.
- 1930—All officers of the South Australian Public Service over the age of sixtyfive years were compulsorily retired. The South Australian basic wage was reduced by 18c to \$1.25 a day. Transport Control Board, State Finance Committee and Unemployed Relief Council established.
- 1931—City Bridge opened. Financial Plan formulated at the Premiers' Conference adopted and Financial Emergency Act passed. Federal basic wage reduced by 10 per cent for twelve months but was to be adjusted in accordance with a retail price index. State basic wage reduced from \$1.25 to \$1.05 a day. Basic wage for females reduced, first from \$3.95 to \$3.50 and later to \$3.15 a week.
- 1932—Boundaries and names of a number of local government areas changed and others abolished following the report of a commission.
- 1933—The Farmers Assistance Board, the Betting Control Board and the Metropolitan and Export Abattoirs Board established.
- 1934—Water restrictions in force from May until the following January.
- 1935—The Nomenclature Act of 1935 restored the former German names to a number of towns, the names of which had been changed in 1917.
- 1936—Centenary year of the State's foundation celebrated. Contract signed for the completion of Parliament House and the foundation stone laid by the Governor, Sir Winston Dugan.

- 1937—South Australian Housing Trust established. New Federal basic wage of \$7.40 per week which incorporated a 'prosperity' loading declared. First trolley bus service inaugurated. Mount Bold reservoir with a capacity of 30 000 megalitres filled, almost doubling Adelaide's water storage. Schools closed and other precautions taken as a result of an epidemic of poliomyelitis.
- 1938—First South Australian Housing Trust dwelling completed.
- 1939—State's worst heat wave and disastrous bush fires experienced during the first two months of the year. Record high temperature of 47.6°C recorded in Adelaide. New Parliament House opened by His Excellency the Governor-General, Lord Gowrie.
- 1940—Goolwa Barrage completed at a cost of \$1 400 000. Birkenhead Bridge opened. A rapid development of secondary industry took place as munition annexes were added to existing factories and new factories were opened.
- 1941—Scriptural instruction in State schools commenced. First naval vessel built in South Australia launched. First blast furnace to be built at Whyalla went into operation. Child endowment payments inaugurated. Payroll tax commenced.
- 1942—Daylight saving of one hour introduced for almost three months. Wages and prices pegged and profits and interest rates restricted. Racing and bookmaking prohibited. Rationing of tea and clothing commenced. Widows pensions instituted. The uniform Income Tax Act came into force. First coal obtained from Leigh Creek.
- 1943—Price stabilisation legislation came into force. Butter rationing commenced. Wage and price subsidies were introduced and the prices of tea, potatoes and other commodities were reduced in order to bring price indexes and wages to a lower level. Racing resumed but betting shops remained closed.
- 1944—Rationing of meat began. Morgan-Whyalla pipeline officially opened. The first State election with compulsory voting took place. Severe water restrictions imposed. First output of Leigh Creek coal for electricity generation.
- 1945—Unemployment and sickness benefits came into operation. Restrictions imposed on the use of gas and electricity for domestic and industrial purposes.
- 1946—Australian Government munition factories taken over by various private firms, Payment of government subsidies to hospitals commenced. Restrictions on the use of gas and electricity again imposed. The Electricity Trust of South Australia took over the property and functions of the Adelaide Electric Supply Co.
- 1947—Fruit fly detected in metropolitan orchards and efforts made to eliminate it by stripping gardens and orchards. Sugar rationing abolished. Conciliation commissioners appointed following an amendment to the Federal Conciliation and Arbitration Act. Severe restrictions imposed on imports from North America.

- 1948—Restrictions on the use of gas and electricity imposed on a number of occasions during the year because of the shortage of coal. Preparation of the Woomera rocket range commenced. Forty hour working week introduced by Arbitration Court award. Serious bush fires occurred in January. Severe storms during April resulted in widespread damage including the destruction of the Glenelg jetty. The free medicine scheme came into operation. Clothing and meat rationing abolished. Full-scale production of the 'Holden' car commenced.
- 1949—Petrol rationing by the Australian Government declared illegal but resumed later in the year under a State Act. An extended national coal strike occurred. Water pipeline to the Woomera rocket range completed. The Australian and South Australian Governments ratified an agreement for the standardisation of railway gauges.
- 1950—Petrol, butter and tea rationing discontinued. Federal free drugs scheme came into operation. Water restrictions imposed in December and remained in force until June 1951.
- 1951—Serious bush fires occurred in January. Wool prices reached a record high level. Distribution of free milk to school children introduced.
- 1952—The hospital benefits scheme came into operation. Price control on clothing removed in South Australia. Severe import restrictions gazetted. Installations for the bulk handling of grain opened at Ardrossan. Compulsory chest X-rays introduced.
- 1953—Remaining controls on building removed. Port Pirie became the first country town to be proclaimed a city. The medical benefits scheme came into operation. Automatic quarterly cost-of-living adjustments to the basic wage discontinued. Size of the State Cabinet increased from six to eight Ministers.
- 1954—A severe earthquake occurred in Adelaide on 1 March. Her Majesty Queen Elizabeth II visited South Australia. First unit of Port Augusta power station opened. Construction of dwellings in Elizabeth commenced. Water from the River Murray pumped into metropolitan reservoirs through the Mannum pipeline.
- 1955—Adelaide Airport as West Beach opened. The new satellite town at Elizabeth officially opened.
- 1956—River Murray flooded for several months and caused considerable damage in irrigation and reclaimed areas. Town Planning Committee established. Atomic device exploded at Maralinga. Salk poliomyelitis vaccination program commenced.
- 1957—Centenary of responsible government in South Australia celebrated. Long service leave legislation passed by the South Australian Parliament.
- 1958—Visit of Queen Elizabeth the Queen Mother, to South Australia. Introduction of parking meters to Adelaide. South Para reservoir opened and connected to Adelaide water supply. Final run by a street tram in Adelaide, following conversion to diesel bus transport.

- 1959—South Australia ceased to be a claimant State for special grants from Grants Commission. Full-scale television transmission commenced. Sir Thomas Playford created record term as Premier in a British country (26 years 125 days). Aborigines became eligible for age, invalid and widows pensions.
- 1960—First Adelaide Festival of Arts held (March 12-26). Completion of second unit and formal opening of Thomas Playford power station at Port Augusta.
- 1961—First United Kingdom Trade Commissioner appointed to South Australia.

  Compulsory driving tests introduced. The trailer ship *Troubridge* made its first run from Port Adelaide to Kingscote and Port Lincoln. Sturt's Desert Pea declared State's official floral emblem.
- 1962—Myponga Reservoir completed and linked to Happy Valley Reservoir.

  Duplication of Morgan-Whyalla pipeline commenced.
- 1963—Population of the State passed 1 000 000 mark. Port Stanvac oil refinery 'on stream'. School leaving age increased to fifteen years. Three weeks annual leave for employees governed by State awards and determinations introduced. First direct dialling for an overseas telephone call from South Australia. Major gas flow from Gidgealpa No. 2 well. Royal visit by Her Majesty, Queen Elizabeth II.
- 1964—Work commenced on conversion of Port Pirie-Broken Hill railway to standard gauge. First gas from Port Stanvac refinery piped for use in Adelaide's gas supply. Record wind gust (148 km/h) and all-time low barometric reading (985 mb) registered at Adelaide on 12 July. New world land speed record set by Donald Campbell on Lake Eyre.
- 1965—Election of first Labor State Government since 1933. First country television station opened at Port Pirie. Steel works including a basic oxygen steel making plant opened at Whyalla. First tenders let for Torrens Island power structure. First woman judge in Australia appointed to Supreme Court of South Australia. Size of the State Cabinet increased from eight to nine Ministers.
- 1966—Women sworn in for jury service for the first time. The Flinders University of South Australia at Bedford Park officially opened by Queen Elizabeth, the Queen Mother. Second major natural gas strike in Gidgealpa area. New outlet tunnel 2 700 metres long from Happy Valley Reservoir completed. ELDO rocket Europa-1 launched at Woomera. Industrial Commission of SA replaced the SA Board of Industry.
- 1967—Totalizator Agency Board operated off-course in South Australia for the first time. First South Australian lottery drawn. Federal Basic Wage superseded by Total Wage concept. Liquor trading hours extended to 10 p.m. WRESAT-1, first Australian orbital satellite launched from Woomera. New record low annual rainfall for Adelaide (257 mm). Torrens Island power station commenced operations. First off-shore drilling rig—Ocean Digger—constructed and launched at Whyalla.

- 1968—State elections held, Labor Government returned but subsequently defeated on the floor of the House at the first meeting of the new Parliament. New Liberal Premier, Mr R. S. Hall sworn in. Four weeks leave for State Government employees introduced. Construction commenced on State's first satellite communications station at Ceduna. Legal drinking age lowered from twenty-one to twenty. Sealed highway from Broken Hill to Adelaide opened. Sir James Harrison first Australian-born Governor of South Australia sworn in.
- 1969—Work begun on second major pipeline to bring River Murray water to Adelaide. Forty-first Congress of the Australian and New Zealand Association for the Advancement of Science held in Adelaide. Electricity Trust signed \$120 million contract for supply of natural gas. Natural gas flowed through completed 832 kilometre pipeline from Moomba-Gidgealpa to Adelaide.
- 1970—Bulk carrier of 57 000 tonnes the Yarra River, the fiftieth ship to be built at Whyalla since 1941, launched. Abortion law reformed in South Standard gauge working on new line between Port Pirie and Broken Hill begun. First direct telecast from England to Australia First contracts signed for construction of \$4.8 million Adelaide Festival Theatre. Plans announced for Australian Mineral Foundation at Glenside after a \$1 million gift. Hall LCL Government defeated on vital issue and Dunstan ALP Government returned at subsequent general election. Contract let for building of \$3,625,000 Port Augusta Hospital. Hairy-nosed wombat adopted as State's faunal emblem. World record price of \$27 200 paid for merino stud ram at Adelaide Royal Show, Royal Commission appointed to investigate disorder arising out of a street demonstration. Contract let for a \$1.9 million bridge across Spencer Gulf at Port Augusta. Ministry increased by one to ten members. South Australian wine production of 196 852 184 litres in 1969-70 a record. Duplication of Morgan-Whyalla pipeline ready for use. South Australian Government applied to Commonwealth Grants Commission for financial assistance and received an interim grant.
- in London. Fluoridation of Adelaide water supply commenced. Agreement for supply of natural gas to Sydney from South Australian gas fields finalised. The Amanda Miller, an oil tanker of 63 000 tonnes launched at Whyalla. Points demerit scheme for drivers who commit road traffic offences introduced. Age of Majority reduced from twenty-one to eighteen. Keel of Clutha Capricorn, the largest ship ever built in Australia (approximately 80 50 tonnes) laid at Whyalla. Plans announced for the building of \$50 million civic centre at West Lakes. Commonwealth Government transferred power to levy payroll tax to the States. Ministry of Environment and Conservation created. Daylight saving introduced in South Australia for the first time since the 1939-45 War. Cattle and pig numbers in SA a record. Agreement to build Dart-

- 1971—(continued) mouth Reservoir ratified by SA Parliament. Plans announced for development of Patchawarra oil field at estimated cost of \$200 million including pipelines to Adelaide and Sydney. Death of SA Governor Sir James Harrison in office and Sir Mark Oliphant, the first SA born Governor, sworn in. Wearing of seat belts in motor vehicles made compulsory. Plans announced by the South Australian National Football League for new headquarters at West Lakes.
- 1972—Seventh Festival of Arts held in Adelaide. Plans announced for creation of new city of more than 100 000 people near Murray Bridge. liquor laws relaxed. New Stirling to Verdun freeway opened. Plans announced for the sealing of the Eyre Highway from Penong to the Another major oil flow from the Tirrawarra field WA border. announced. New laws regulating door-to-door selling and used car dealing introduced. The Clutha Capricorn of 80 500 tonnes, the largest ship ever built in Australia, launched at Whyalla. Plans to filter Adelaide's water supply at a cost of \$35 million announced. University of Adelaide's educational radio station VL5UV commenced broadcasting. Work begun on \$40 million Flinders University medical centre. New Community Welfare, Mining and Juvenile Courts Acts came into operation. Weather temperature reports changed to degrees Celsius. North Haven residential project to house 4 000 people at the northern end of Le Fevre Peninsula announced. Davlight saving re-introduced for 1972-73 and subsequent summers. South Australian Film Corporation commenced operation. South Australia's first ombudsman. Mr G. D. Combe, appointed.
- 1973—New long service leave provision for three months leave after ten years service came into force. Plans announced for the building of a new \$40 million lubrication oil refinery at Port Stanvac. Work begun on \$62 million Dartmouth dam project. New \$11 million hospital opened at Modbury. New 240 metre, \$3.5 million bridge across the River Murray at Kingston opened. Dunstan ALP Government returned at State election to become the first ALP Government to retain office after a general election in South Australia since 1910. Cross Lotto game introduced by State Lotteries Commission. Lake Eyre filled with water for the first time since 1950 because of floodwaters in the north of Legislation enacted for the creation of a Land Prices Commission with the power to freeze the price of any property. \$6.6 million Adelaide Festival Theatre opened by the Prime Minister. Legislation enacted for adult franchise and proportional representation Australian Government aid to nonfor the Legislative Council. government schools in South Australia increased by 45 per cent to Tenders called for the sealing \$9.75 million for 1974 and 1975. of the last 90 kilometres for the Eyre Highway. Compulsory blood tests for road accident victims introduced. World record price of \$36 000 paid for Merino stud ram at Royal Adelaide Show. South Australian Ministry increased from ten to eleven and Ministry of Sport and Recreation created, \$50 note issued for first time. Bill passed in

- 1973—(continued) State Parliament for extensive improvement in workers' compensation benefits. Australian Government took over responsibility for Aboriginal Affairs from South Australian Government.
- 1974—World Gliding Championships held at Waikerie. Fire at Berri winery caused \$4 million damage. Prince Philip, the Duke of Edinburgh, visited South Australia. University of Adelaide celebrated its centenary. Eighth Festival of Arts held in Adelaide. Prime Minister opened new \$4.8 million Australian Broadcasting Commission complex at Collinswood. Police dog patrols commenced. Plans announced for building of \$2.8 million boat harbour at Taperoo. Building and conversion program to provide forty new pre-schools commenced. New \$2 million Western Community Hospital opened at Henley Beach. First match held at the new South Australian National Football League headquarters at West Lakes. Tree planting ceremony held at Monarto, at which the Governor, Sir Mark Oliphant, planted the first of 5 million trees to be planted in the area. Australian Government agreed to provide \$22 million for the sealing of a new two-lane highway between Port Augusta and Alice Springs. Conversion of road signs to metric measurements undertaken. New development plan for Adelaide released. Judgment handed down making four weeks annual leave standard for workers under State awards. State primary schools began a new program of continuous admission of children on their fifth birthday. New State taxes on petrol and tobacco announced. Playhouse, Space and Amphitheatre at the Adelaide Festival Centre opened. General Motors-Holden announced a \$15 million expansion plan for its Elizabeth plant. Report released recommending expenditure of \$11 million on improvements to the Adelaide Metropolitan Area coastline. Legislation allowing hotel trading to 12 midnight on Fridays and Saturdays came into force.
- 1975—Phase I of \$54 million Flinders Medical Centre opened. Transmission of television in colour commenced. Plans announced for a \$3 million rental housing project at West Lakes. Work began on \$140 million Tarcoola-Alice Springs rail link. International Equestrian Exposition 1975 held in Adelaide and attended by Her Royal Highness, Princess Anne. Plans announced for rebuilding of Aboriginal township of Point Pearce on Yorke Peninsula. Plans announced for the building of a new meteorological centre at Kent Town, A \$15 million tourist resort planned for Second Valley near Normanville. State Election held on 12 July, after the Legislative Council failed to pass the Railways (Transfer Agreement) Bill; the Dunstan ALP Government was returned with a reduced majority and the Bill was subsequently passed. Medibank commenced operations in South Australia. commenced on the 800 kilometre Heysen Trail extending from Cape Jervis to Mount Babbage in the Far North. South Australia became the first State to legalise homosexuality between consenting adult males. Legislation for the redistribution of House of Assembly electoral boundaries passed by the Legislative Council. Bankcard began operations in South Australia. The South Australian Industrial Commission adopted the National Wage indexation guide lines for State awards.

1976—The South Australian Government has purchased an aircraft for photographic work and air mapping. FM radio broadcasting began in South Rail track to Christie Downs opened. \$6.25 million Regency Park centre for treatment and care of physically handicapped children opened. The ninth Festival of Arts held in Adelaide. A new commercial radio station (5AA) went to air, Adelaide's first for forty-The new Torrens College of Advanced Education on a twenty-seven hectare site at Underdale officially opened. ten kilometres of the Heysen Trail opened. A new political party, the New Liberal Movement formed. The State Government announced plans to establish a Youth Work Unit to help school leavers and other unemployed young people to find jobs by co-ordinating the education and job finding capacities of the Australian and State Government departments with existing community welfare bodies and voluntary agencies. Work started on the \$3 million State Transport Authority bus depot at Morphettville. Monarto nursery opened. Sir Douglas Nicholls appointed as Governor of South Australia from 1 December Sections of the new coastal route of the Evre High-1976. way opened. Smoking banned on buses operated by the Bus and Tram Division of the State Transport Authority. The Australia Post began a full courier service in Adelaide. Plans announced for on-the-spot fines of \$20 for littering. Price control on petrol removed for a six-month trial period. Plans announced for abolition of South Australian succession duties on estates passing to husbands and wives. Thirty-three metropolitan and fourteen country seats formed in the redistribution of House of Assembly elecorates by the Electoral Commission. Date stamping regulations for all short-life perishable foods approved by Executive Council.



## RECENT INFORMATION

In this section details are given of some important developments which have occurred recently. More up-to-date statistics than those shown in this volume are regularly incorporated in various statistical publications as they become available. A List of Publications is included on page 757.

#### PART 3—CONSTITUTION AND GOVERNMENT

Electorates (pages 55-6)—The Electoral Districts Boundaries Commission, constituted by the Constitution Act Amendment Act (No. 5), 1975, has determined new electoral boundaries for the House of Assembly.

For House of Assembly elections, the State is now divided into thirty-three metropolitan and fourteen country seats. Before the redistribution, the House of Assembly had twenty-eight metropolitan and nineteen country seats.

The Commission has abided by the principle that the number of electors comprised in each electoral district must not vary from the electoral quota by more than the permissible tolerance of ten per cent. As a result, the redistribution of electoral boundaries has increased the number of metropolitan seats by five at the expense of non-metropolitan representation.

The redistribution of electoral boundaries by the Commission does not require validating legislation and becomes operative three months after the Commission's Order. However, under the Act any elector may, within one month of the Commission's Order, appeal to the Full Court of the Supreme Court of South Australia. If the appeals are dismissed the Order becomes operative three months thereafter.

Salaries and Allowances (page 77)—The Parliamentary Salaries Tribunal, pursuant to the provisions of the Parliamentary Salaries and Allowances Act, 1965-1974, has determined new salaries and allowances for Members of Parliament. The salaries and allowances so determined are payable from 1 March 1976.

The basic salary is \$18 730 per member with allowances of between \$2 750 and \$5 900 depending on the area of the member's electorate and the distance from the City of Adelaide.

The following additional payments are also made:

Premier and Treasurer—\$18 730, plus expense allowance of \$2 860.

Deputy Premier-\$11 920, plus expense allowance of \$2 310.

Leader of the Government in the Legislative Council—\$11 350, plus expense allowance of \$2 200.

Other Ministers—\$10 220, plus expense allowance of \$1 930.

President of the Legislative Council and Speaker of House of Assembly—each \$6 130, plus expense allowance of \$720.

Chairman of Committees, House of Assembly—\$3 070, plus expense allowance of \$320.

Leader of the Opposition, House of Assembly—\$10 220, plus expense allowance of \$1 930.

Leader of the Opposition, Legislative Council—\$3 980, plus expense allowance of \$610.

Deputy Leader of the Opposition, House of Assembly-\$3 980.

Government Whip-\$2 050.

Opposition Whip—\$2 050.

#### PART 4—LAND SETTLEMENT

Primary Producers Emergency Assistance Act, 1967 (page 112)—The Minister of Lands has announced emergency drought assistance to primary producers in declared drought areas of the State.

A 50 per cent freight subsidy for stock going to and from agistment and on freight for fodder has been provided under the Primary Producers Emergency Assistance Act, 1967. Essential carry-on finance for primary producers affected by the drought is also available under the provisions of the Act.

The State Government has also sought the co-operation of local government authorities in supervising and carrying-out the slaughtering and burial of drought-affected livestock. The costs incurred by the local government authorities are being reimbursed by the State Government.

#### PART 6-SOCIAL ENVIRONMENT

Hospital and Medical Benefits (pages 294-5 and 297)—Under the new health insurance arrangements to commence on 1 October 1976 everyone, except low income earners, most pensioners, certain Defence personnel and Repatriation

beneficiaries will contribute directly towards the cost of their health care. Under the present arrangements, the entire cost of Medibank is being met from general revenue.

Coverage for medical and optometrical consultation benefits will continue to be universal for all Australian residents, and will be achieved in one of three ways:

- (i) Standard Medibank. This will continue to provide 85 per cent of schedule fees (with a maximum patient contribution of \$5 for any one service where the doctor charges the schedule fee), plus free standard ward accommodation in public hospitals, with treatment by doctors engaged by the hospital, to those persons who elect to pay a levy of 2.5 per cent on their taxable incomes. In any instance, the levy will not exceed \$300 a year for family cover or \$150 a year for individual cover.
- (ii) Standard Medibank, plus extra hospital insurance. This will provide Standard Medibank benefits plus treatment by a doctor of the patient's choice, in shared room (intermediate) accommodation in public hospitals, to persons who elect to pay the levy and, in addition, purchase basic hospital-only cover from a registered health insurance organisation (including Medibank Private Insurance). The hospital fund benefits may also be applied towards meeting charges for private hospital treatment.
- (iii) Full private medical and hospital cover. This will provide both hospital and medical benefits through private insurance. Persons opting to be exempted from the levy can do so by insuring privately with a registered health insurance organisation (including Medibank Private Insurance). This will provide the same coverage for medical benefits as provided to levy payers and coverage for intermediate or private hospital care.

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Flora: T. N. Lothian; 1967, 23-7.

Droughts in South Australia: Director and staff members of Bureau of Meteorology; 1967, 7-10.

Flinders University of South Australia: Vice-Chancellor and staff members of Flinders University; 1967, 163-8.

The Wine Industry of South Australia: J. C. M. Fornachon and E. W. Boehm; 1968, 376-95.

Soils of South Australia: K. C. Northcote and J. A. Beare; 1969, 21-31.

Weapons Research Establishment: Director and staff members of Weapons Research Establishment; 1969, 184-92.

Aboriginal Relics: Robert Edwards; 1969, 201-8.

Geology of South Australia: N. H. Ludbrook and R. K. Johns; 1970, 3-18.

Mammals of South Australia: P. F. Aitken; 1970, 42-9.

Freshwater Fish of South Australia: C. J. M. Glover and W. G. Inglis; 1971, 27-34.

Birds of South Australia: H. T. Condon; 1972, 28-40.

Reptiles of South Australia: T. F. Houston; 1973, 32-42.

Fossils of the Flinders and Mount Lofty Ranges: N. S. Pledge; 1974, 31-44.

The University of Adelaide 1874-1974: Vice-Chancellor and staff members of the University of Adelaide; 1974, 198-212.

Minerals of South Australia: J. E. Johnson and J. M. Scrymgour; 1975, 21-39.

The Adelaide Festival Centre: Publicity Department of the Adelaide Festival Centre: 1975. 245-9.

Whyalla: The Broken Hill Proprietary Company Limited; 1975, 679-701.

#### **PUBLICATIONS**

Duplicated issues include bulletins or press releases which give, as soon as available, figures and some comment concerning a particular subject and a Monthly Summary of Statistics which supplies the latest information on a selected range of subjects. Other publications embrace a Pocket Year Book of South Australia containing a wide range of statistical information in a compact form and a Statistical Register of South Australia, issued in eight parts, in which is provided, without comment, detailed historical and current statistics in many fields.

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